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UNITED STATES WARSHIP TRANSFERS TO ARGENTINA, BRAZIL, AND CHILE: OPTIONS FOR U.S. POLICY

BY
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by

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B.A., University of Colorado, 1983

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ABSTRACT

The United States Navy plans to decommission several classes of warships in the next decade. Each of the major Southern Cone countries of Latin America (Argentina, Brazil, and Chile) perceives a geopolitically-driven need for a blue-water navy. Each of these navies needs frigates and destroyers to achieve blue-water status. This thesis examines U.S. ship transfer policy to the Southern Cone. It concludes that the Adams-, Coontz-, and Knox-class ships that the U.S. navy is beginning to decommission should be leased to the Southern Cone navies in order to bolster their naval forces and to support mutual maritime security interests. The poor economic status of these countries mandates that the lease terms be made as favorable as possible and that the annual number of ship leases be kept to a few.

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I. INTRODUCTION

A. PURPOSE AND ORGANIZATION

1. Major Research Questions

The United States Navy plans to decommission several classes of warships over the next decade as its force is cut.[1] These ships will be either placed into the inactive reserve (mothballs); transferred to the Naval Reserve Force (NRF); stricken from the Naval Vessel Register (NVR) and used for spare parts or as a target; or designated as a possible candidate for Foreign Military Sales (FMS).

At the same time, the navies of the Southern Cone of Latin America[2] are also experiencing force cutbacks primarily due to their weak economies. As the U.S. Navy draws down concurrent with a subsiding Soviet global security threat, it should remain capable of meeting its worldwide commitments. The navies of Argentina, Brazil, and Chile (the ABC countries), however, have not been capable in the past, nor will they be able in the future, of performing the types of missions required of them by their security interests.

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[1]The U.S naval force will be cut from 565 to 425 ships by the end of this decade according to a Congressional Budget Office study cited in Jim Bencivenga, "US Navy Facing Changed Mission," The Christian Science Monitor, 05 November 1991, 6.

[2]For the purposes of this paper, the Southern Cone is defined to be Argentina, Brazil, and Chile. Although the Southern Cone is generally defined as including Uruguay and Paraguay, these are substantially smaller countries, with much smaller navies.

The United States has historically supplied the Southern Cone navies with second-hand ships decommissioned from the U.S. fleet. These navies are still today largely composed of World War Two-era, U.S.-made ships. Transfers of this type have generally had a political and military benefit for both the United States and the respective recipient.

This thesis examines the political, military, and economic aspects of future U.S. warship transfers to the Southern Cone. Its purpose is to recommend whether, and under what conditions, the United States should transfer ships from its recently decommissioned classes to the Southern Cone. Specifically, should the United States sell or lease Adams-, Coontz-, and Knox-class ships to the ABC countries? Since World War II, the United States has transferred large numbers of its older ships to the Southern Cone. Most of these platforms were obsolete and of little future value to the U.S. Navy. In almost all cases, the transfers were not controversial. This thesis examines whether, in light of the large number of ships it will decommission in the coming decade, the United States should once again adopt a policy of transferring significant numbers of second-hand warships to the Southern Cone.

In this post-Cold War environment a reassessment must be made as to whether transferring older warships to this region is in the best interest of the United States. With

economic and social problems perhaps surpassing external military security threats as priorities in these countries, it is questionable whether it is in their best interest to continue this policy.

My thesis is that it is in the best interest of the United States to transfer Adams-, Coontz-, and Knox- class ships to the Southern Cone. However, due to the absence of a credible external maritime security threat, and because of these countries' economic difficulties, the number of ships transferred should be no more than one or two ships to a particular country each year. The advantages of transferring a limited number of these ships outweigh the disadvantages. Transferring these ships enhances U.S. national security interests, strengthens the military and political ties between countries, and contributes to the geopolitically-derived mission and effectiveness of these navies during a period of decreasing naval budgets.

In order to develop sound arguments for future ship transfer policy, a series of sequential questions are addressed. First, are the Adams-, Coontz-, and Knox-class ships the types of platforms required by the Southern Cone navies? This question will be answered by classifying the types of navies required by the geopolitical doctrines of Argentina, Brazil, and Chile, and then assessing the present fleet status in each country. It will also examine the reasons why the ABC navies are currently inconsistent with

the types of navies required by their stated geopolitical doctrines. Finally, a ranking of the types of naval surface vessels that are most needed by each navy is developed.

Second, considering the history of U.S. warship transfers to the Southern Cone, what are the transfers options that would be feasible in the future? The feasibility of sales, leases, and coproduction are examined.

Third, what are the advantages and disadvantages for the United States in transferring warships to the Southern Cone?

Finally, considering the advantages and disadvantages, what are the options for future U.S. warship transfer policy to the Southern Cone? The final chapter argues that it is in the best interest for the United States to promote a limited number of ship transfers to the Southern Cone in the future.

2. Organization of Study

The thesis is divided into two parts in addition to the introduction (Chapter I) and the conclusion (Chapter X). Part One (Chapters II-V) defines the types of ships that are currently needed by each of the Southern Cone navies. Chapter II examines the geopolitical doctrines of these countries and how they affect naval force structure and requirements. Chapter III compares the ABC naval order of battle in 1980 and 1990 to describe trends that may affect

future force arrangements. Chapter IV examines the reasons why the current order of battle of the ABC navies is inconsistent with the force organization required by their stated security interests. Chapter V looks at surface ships the United States is decommissioning in the near future. For each Southern Cone country, these U.S. warships are ranked in order of need, affordability, and desirability.

Part Two (Chapters VI-IX) analyzes the factors that must be considered in deciding on a future ship transfer policy towards the Southern Cone. Chapter VI outlines the ship transfer process and appraises the various methods of future ship transfer (i.e., sale, lease, or coproduction). Chapters VII and VIII analyze the advantages and disadvantages of ship transfers. Chapter IX describes three future ship transfer policy options for the United States and recommends one option as the best for future U.S. strategy.

B. SCOPE OF STUDY AND DEFINITION OF TERMS

1. Scope of Study

This thesis focuses on the naval vessel categories listed in Table I.B-1. It does not discuss, in any detail, particular aircraft or weapon types. The reason it concentrates solely on surface ships and submarines is because naval aircraft (other than Maritime Reconnaissance) and weapon systems are ship-based. In other words, a

country's acquisition of naval aircraft and weapon systems is not significant unless its navy has the proper ship types on which to base them.

Of the ships and submarines examined, this thesis limits its analysis to the categories listed in Table I.B-1 because they comprise the major ship types that are used to determine naval force classifications. Craft that are used solely for riverine purposes, amphibious landing craft, and surface ship tenders were omitted for this reason.

2. Definition of Terms

This section defines terms pertinent to the study of naval ship transfers and then specifies the types of ships examined in this thesis.

a. Classification of Ship Categories and Types

Table I.B-1 classifies ship type by tonnage and mission and general category. These definitions will be used throughout this paper.

TABLE I.B-1

SHIP CATEGORIES AND SHIP TYPES

SHIP CATEGORY	SHIP TYPE	ABBREVIATION	TONNAGE/MISSION
SUBMARINES	---	SS[a]	ASW/ASUW
PRINCIPAL SURFACE COMBATANTS	Aircraft Carrier	CV	AAW,ASUW,ASW
	Battleship	BB	Armor protected >30,000/ASUW
	Cruiser	C,CG[b]	>8,000/AAW,ASUW
	Destroyer	DD,DDG[b]	3-8,000/AAW,ASW
	Frigate	FF,FFG[b]	<3,000/ASW
PATROL AND COASTAL COMBATANTS	all ships and craft whose primary role relates to the protection of the sea approaches and coastline of a state		
AMPHIBIOUS	Landing Ship (Tank)	LST	vessels that either move amphibious troops and equipment ashore or coordinate such operations
	Landing Ship (Dock)	LSD	
	Amphibious Transport Dock	LPD	
	Amphibious Assault Ship	LPH	
SUPPORT	Tanker	AO	At-sea refueling
	Icebreaker		

KEY [a]diesel propulsion

[b]The "G" indicates that ship is equipped with a missile launcher

AAW = Anti-Air Warfare
ASUW = Anti-Surface Warfare
ASW = Anti-Submarine Warfare

Source: adapted from The Military Balance (London: Brassey's, 1989), 6.

b. Categories of Navies

This subsection categorizes navies by the types and numbers of ships they have. Navies will be classified as having coastal, brown, or blue water capabilities. It uses definitions developed by Michael A. Morris in his work Expansion of Third World Navies.[3]

(1) Coastal Navy. This is what Morris defines as an "offshore territorial defense navy." Its capabilities include considerable offshore territorial defense up to Exclusive Economic Zone (EEZ) limits.[4] A costal navy consists of at least six to fifteen principal surface combatants and submarines.

(2) Brown Water Navy. This thesis equates a brown water navy with what Morris describes as an "adjacent force projection navy." Its capabilities include "impressive territorial defense and some ability to project force well beyond the EEZ". Helicopter operations can be conducted from a number of ships. A brown water navy may

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[3]Morris, Expansion of Third World Navies (New York: St. Martin's Press, 1987), 22-49. Note that these categories are solely applied to Third World navies and are not intended to provide criteria for evaluating superpower navies. For an alternative, but looser definition, see Geoffrey Till, Modern Sea Power (London: Brassey's Defence Publishers, 1987), 47. Till defines four categories of navies: global, blue water, regional, and coastal.

[4]The EEZ extends from the 12 nautical mile (nm) territorial sea limit out to 200 nm. See Morris, 10.

have a cruiser and consists of more than fifteen principal surface combatants and submarines.

(3) Blue Water Navy. For the purposes of this study, a blue water navy is defined by what Morris calls a "regional force projection navy." Its capabilities include "impressive territorial defense and some ability to project force in the adjoining ocean basin." Additionally, the navy has an aircraft carrier capable of launching attack aircraft. Many ships are capable of conducting at-sea helicopter operations. A blue water navy probably has a cruiser and consists of more than fifteen principal surface combatants and submarines. A blue water navy has numerous support ships including tankers capable of refueling at sea. It is likely to have considerable amphibious force projection capability, including the transport and landing of troops, heavy equipment, and supplies.

C. METHODOLOGY AND SOURCES

This thesis is based solely on unclassified sources. The author conducted interviews with various key arms transfer and Latin American experts during their visits to the Naval Postgraduate School. The author also conducted a research trip to Washington, D.C. in September 1991. This trip included interviews with principal policy-makers in the Office of the Secretary of Defense (OSD), the Office of the

Chief of Naval Operations (CNO), the Navy International Programs Office (NIPO), and the Department of State.

The thesis uses a decision analysis methodology developed by the author. First, a Southern Cone need for further ship transfers is established. To determine the platform needs of each navy, a method of weighted factor-analysis is developed.[5] Geopolitical factors and current naval order-of-battle are assessed. A table is presented for each navy that assigns numerical values for each type of platform (Tables III.A-6, III.B-7, and III.C-6). The value is used as a weighted factor in ranking the desirability of U.S. ships available for transfer. Ten other weighted-factors are analyzed in Tables V.B-1 through V.B-7, one for each of seven different platform types. The numerical values assigned for each factor are subjectively the author's. Other analysts may arrive at different numerical values. The primary merit of this method is that it can be used generically to assess ship transfer desirability from a recipient's perspective for any navy in the world.

Next, a cost-benefit evaluation is conducted concerning possible future ship transfers and the particular method of transfer. Finally, a policy recommendation is made

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[5]An alternate technique of assessing weighted factors can be employed using the MS-DOS computer program Expert Choice (McLean, Virginia: Decision Support Software, 1986). One limitation of this program is that its analysis is limited to a maximum of seven different main factors (ten factors are analyzed in Chapter V).

concerning the future transfer of decommissioned U.S. naval warships to the Southern Cone.

II. TYPES OF NAVIES REQUIRED BY SOUTHERN CONE GEOPOLITICS

This chapter examines the geopolitical thinking, themes, and strategies of the ABC countries. Jack Child notes that geopolitical thinking in relation to conflict analysis is

> most prevalent and advanced in the military establishments of three South American countries with a recent history of military rule: Brazil, Argentina, and Chile...These currents of geopolitical thinking are beginning to have a significant impact on national policies and the international relations of the region.[6]

This quote gives a sense of how important geopolitics is to the ABC countries. ABC geopolitics is important militarily because most geopolitical writers in the Southern Cone are military officers or civilians linked to the armed forces.[7] This chapter identifies maritime elements of Southern Cone geopolitics in order to later determine how closely ship acquisitions matched stated strategies during the 1980s.[8]

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[6]See Jack Child, Geopolitics and Conflict in the Southern Cone: Quarrels Among Neighbors (Boulder: Lynne Rienner,1985) [hereinafter "Child(85)"], 4.

[7]See Jack Child, "Geopolitical Thinking," in Louis W. Goodman, Johanna S.R. Mendelson, and Juan Rial (eds.) The Military and Democracy (Lexington, Massachusetts: Lexington Books, 1990) [hereinafter "Child(90)"], 144.

[8]The maritime geopolitical perspective stresses the concepts of sea lines of communication (SLOCs) and choke points. Control of SLOCs implies control of commerce, trade, and movement of military assets. Choke points, such as canals and straits, provide the easiest location to control the SLOCs that pass through them. See Child(85), 24.

This chapter is divided into three sections. The first section concentrates on the maritime component of Southern Cone geopolitics in order to determine the type of navy each country requires vis-à-vis its geopolitical strategy. The next section summarizes potential Southern Cone conflict areas. Confrontation and friction have already occurred in a few of these areas, while others have been peaceful to date but could erupt into conflict at any time. The final part of this chapter evaluates the type of navy required by each country, as determined from geopolitical criteria.

A. SOUTHERN CONE GEOPOLITICS

1. Argentine Geopolitics

Argentine geopolitical thinking has long been reactive towards its major regional threat, Brazil. It has historically viewed Argentina as a country that has suffered geopolitical aggression from Brazil, Chile, the United Kingdom, and the United States.[9] It believes these countries are collaborating to deny Argentina its destiny in the Malvinas, the South Atlantic, and Antarctica.[10] Argentine geopolitical thinking is centered on two broad topics: (1) the restoration of Argentina's rightful place in the world and (2) drafting and implementing a "National

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[9]Ibid., 42.

[10]Malvinas is the name Argentines call the Falkland Islands.

Project" that will unify the country and enable it to achieve its destiny of greatness.[11] Another Argentine concern is the maintaining of territorial integrity. This implies

> protecting its continental area in South America, the Malvinas, Georgias and Sandwich del Sur islands, the Argentine Antarctic sector and the territorial seas, the maritime economic areas and their respective continental shelves.[12]

The strategic maritime elements of Argentine geopolitics are comprised in the concept of Atlantártida, which stresses the unity that the South Atlantic offers as the body of water between mainland Argentina and Antarctica. Atlantártida includes four main areas. First, it comprises Antarctica, where Argentina feels it must solidify its territorial claims in order to secure the rights to potentially vast deposits of seafood, minerals, and oil. Second, it includes the Malvinas Islands, which Argentina sees as its gateway to Antarctica. Argentina believes it must occupy them in order to neutralize British and Chilean claims to Antarctica.[13] Third, it encompasses the South Atlantic, which contains vast resources and serves as a SLOC to Antarctica. Due to its geographical position, the

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[11]Child(85), 41.

[12]See Rear Admiral Mario Lanzarini, Argentine Navy, "Argentina and the Sea," in Patrick Wall (ed.) The Southern Oceans and the Security of the Free World (London: Stacey International, 1977), 217.

[13]Child(85), 46-47.

Argentine Republic has developed a considerable dependence on South Atlantic waterways by which over ninety percent of its foreign trade moves.[14] Last, Atlantártida consists of the Beagle Channel islands, which Argentina views as the key site for guarding the access from the Atlantic to the Pacific, a role Argentina believes rightfully belongs to it.

2. Brazilian Geopolitics

The Brazilian school is the most significant in Latin America because of its impact on contemporary Brazil and because it has served as a model for others. It has also produced strongly reactive geopolitical thinking, especially in Argentina.[15]

The single dominant characteristic of Brazilian geopolitical thinking has been the emphasis towards grandeza, the Portuguese term for Brazil's ambition to become the first Latin American superpower. From this concept, Brazil derives a strategy similar to the Unites States' Manifest Destiny, in that it feels it must extend its continental presence through expansion and development.

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[14]See Lanzarini, "Argentina and the Sea," 220.

[15]Child(85), 34.

Argentina has been Brazil's major challenger and primary security threat in the region.[16] Recently, however, these two countries have made progress towards reducing their rivalry and increasing cooperation.[17]

Brazil maintains three major maritime geopolitical themes.[18] First, Brazil considers the South Atlantic and Atlantic Narrows to be a vital national interest.[19] Because of Brazil's geographic position, nearly all of its foreign trade is transported by sea, with only a small fraction carried by land within South America.[20] Brazil increased in international geopolitical significance when oil supertankers, which could not transit the Suez canal, began to travel around Africa's Cape Horn and then northward

[16]See Stanley E. Hilton, "The Brazilian Military: Changing Strategic Perceptions and the Question of Mission," Armed Forces & Society, Spring 1987, 332.

[17]The two countries have begun the process of economic integration. See "Brazil and Partners Launch MERCOSUR," Latin American Regional Reports: Brazil Report, 02 May 1991, 8. Also, Brazil and Argentina together formally repudiated the manufacture of nuclear weapons. See Shirley Christian, "Argentina and Brazil Renounce Atomic Weapons," The New York Times, 29 November 1990, A1.

[18]For a detailed discussion of Brazilian geopolitical themes in general, see Philip Kelly, "Traditional Themes of Brazilian Geopolitics and the Future of Geopolitics in the Southern Cone," in Philip Kelly and Jack Child (eds) Geopolitics of the Southern Cone and Antarctica (Boulder: Lynne Rienner, 1988) [this book hereinafter referred to as "Kelley and Child"], 111-122.

[19]The Atlantic Narrows is between the Brazilian northeast salient and southwestern corner of the northwest bulge of Africa.

[20]See Domingos P.C.B. Ferreira, The Navy of Brazil: An Emerging Power at Sea (Washington, D.C.: National Defense University, 1983), 18.

through the South Atlantic. There has been discussion, off and on, of the formation of a South Atlantic Treaty Organization (SATO) in which Brazil's navy would play a important role.[21] Also, Brazil has expanded its export market to West Africa and thus treats the South Atlantic as vital to its economic livelihood.[22] There has been a long tradition of strong affinity between both sides of the South Atlantic.[23]

Second, Antarctica is considered a vital interest, as it is in Argentina. The interest is relatively recent, with Brazil promoting its own Antarctic claim formula.[24] Brazil has conducted Antarctic expeditions and appears committed to maintaining a presence there.

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[21]See René Luria, "The Brazilian Armed Forces: Budgets and Ambitions Diverge," International Defense Review, July 1989, 933.

[22]By 1985, Brazil was Nigeria's second-largest trading partner. It has also established trade ties with Angola and Mozambique. See Armin K. Ludwig, "Two Decades of Brazilian Geopolitical Initiatives and Military Growth," Air University Review, July-August 1986, 62.

[23]Primarily due to three factors: (1) geographic proximity; (2) political, economic and military ties established by the Portuguese among their Atlantic colonies; and (3) three centuries of slave traffic from Africa to Brazil heavily influenced Brazilian culture and racial composition. See Ferreira, 15.

[24]This concept, known as the frontage theory, argues that each South American nation should have a sector of Antarctica defined by the eastern and western-most longitudinal meridians of its territory that are not obstructed by a southerly neighbor. See Child(85), 37-38.

Last, Brazil's maritime interests include protection of its EEZ.[25] Protecting its 5,000 mile coastline is a challenging task for the Brazilian navy. One of Brazil's most powerful national interests is the search for energy self-sufficiency in order to support its industrial growth. Brazil's EEZ contains significant energy-producing oil fields. Currently importing much more oil than it produces, Brazil desires to exploit its offshore oil reserves as much as possible. These facilities would require additional maritime protection by naval forces.[26]

3. Chilean Geopolitics

General Pinochet, Chile's leader from 1973 to 1989, is the country's most influential geopolitical thinker. Historically, a major theme has been a defense of its territorial gains won in the War of the Pacific.[27] More

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[25]Brazil joined the 200 nm EEZ crusade due to its rising interest in SLOCs and a national campaign to diversify export markets. See Hilton, 335.

[26]Michael A. Morris, International Politics and the Sea: The Case of Brazil (Boulder: Westview, 1979), 252.

[27]The War of the Pacific (1879-1883) was a conflict between Chile, Peru, and Bolivia. Chile quickly achieved naval supremacy allowing for a decisive land engagement. Peru lost an entire coastal province and Bolivia lost its only access to the Atlantic ocean.

recently, however, Chile's geopolitical interests have focused on Argentina.[28]

Chile, more than any other country in Latin America, depends on the sea.[29] Chile's geopolitical doctrine contains four major maritime components. First, is its interest in Antarctica. As with Argentina, Chile subscribes to a tri-continental archipelago theme that is based on preeminence over its coastline, the Magellan southern tip and its oceanic islands in order to strengthen its SLOCs to its Antarctica territory.[30] Chilean society strongly believes, as the southernmost country in the world, in its right to Antarctic claims. Chile fears Antarctica will become a future theater of international rivalries.[31]

Second, Chile views itself as the gatekeeper to the Atlantic. As in Argentina, the Beagle Channel islands play a strategic geographic role. Chile wants to control this waterway in order to have unrestricted access to the

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[28]For a detailed study of Chilean geopolitics and how it differs from the other Southern Cone countries, see Howard T. Pittman, "From O'Higgins to Pinochet: Applied Geopolitics in Chile," in Kelly and Child, 173-183.

[29]See Robert L. Scheina, "The Chilean Navy," United States Naval Institute Proceedings, March 1988 [hereinafter "Scheina(88)"], 32.

[30]See Rodolfo Codina and Gustavo Jordan, "The Chilean Navy Is On Patrol, United States Naval Institute Proceedings, March 1990, 62.

[31]See David S. Harvey, "Southern Cone Strategy: The View From Santiago," Defense & Foreign Affairs, July 1985, 17.

Atlantic and to consolidate its Antarctic interests. Another reason why this route is important to Chile is because of the possibility of increased shipping through it if the Panama canal were to close down.[32]

Chile's third primary maritime concern is the South Pacific, where it sees itself as a manager of the circulation and use of the area's resources.[33] Chile's claim to several South Pacific islands, including Easter Island, provide bases from which it can control SLOCs into Antarctica.[34]

Last, Chile's maritime security interests includes protecting its EEZ that it feels is being exploited by Soviet and East European trawlers.

This section has outlined the maritime-related geopolitical interests of the ABC countries. The next subsection briefly outlines Southern Cone areas of conflict.

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[32]Ibid.

[33]See César N. Caviedes, "The Emergence and Development of Geopolitical Doctrines in the Southern Cone Countries," in Kelly and Child, 20.

[34]Chile is currently building a shipping port at Easter Island. It already has a runway that was recently enlarged after Chile authorized the United States to use it for emergency space shuttle landings. See Codina, 62-63 and Heraldo Muñoz and Carlos Portales, Elusive Friendship: A Survey of U.S.-Chilean Relations (Boulder: Lynne Rienner, 1991), 68.

B. SOUTHERN CONE MARITIME AREAS OF CONFLICT

This section summarizes six areas of potential conflict for one or more of the ABC countries. The six areas are: (1) Beagle Islands; (2) Malvinas Islands; (3) South Atlantic; (4) Antarctica; (5) South Pacific; and (6) EEZ and Law of the Sea. A brief background is provided on each area, including historical hostilities that have occurred. The section ends by determining the types of navies required by each Southern Cone country based on its geopolitical doctrine and maritime-related interest areas. Determining naval force composition requirements in this way results in an ideal navy and does not, for instance, take into account economic affordability. Chapter four discusses some of the reasons why the force structure of these navies are different from the ideal.

Table II.B-1 displays the results of a study performed by Jack Child in which he surveyed geopolitical journal articles published by Southern Cone authors.[35] The raw number of journal articles about a specific geopolitical subject provides insight as to which geopolitical interests were most important for a given period. Not surprisingly, for the period from 1982 to 1986, the Malvinas Islands appeared as the subject of the most journal articles. The table also indicates the total number of journal articles

[35]See Child(90), 146-158.

published per subject for the period 1947 to 1986. The South Atlantic has been the most published topic since 1947. Studying this table reveals that for all topics except Argentina-Brazil, a significant portion of the total number of articles on each subject has been published in the four year period from 1982 to 1986. This indicates a fairly recent increase in the importance of geopolitical thinking.

TABLE II.B-1
GEOPOLITICAL THEMES IN SOUTHERN CONE JOURNALS: 1982-86 AND 1947-86

1982-86		1947-86	
THEME	NO. OF ARTICLES	THEME	NO. OF ARTICLES
1. Malvinas Islands	45	1. South Atlantic	69
2. South Atlantic	37	2. Antarctica	68
3. Antarctica	31	3. Malvinas Islands	59
4. South Pacific	15	4. Beagle Channel	43
5. Beagle Channel	12	5. South Pacific	31
6. Argentina-Brazil	2	6. Argentina-Brazil	30

Source: adapted from Jack Child, "Geopolitical Thinking," in Louis W. Goodman, Johanna S.R. Mendelson and Juan Rial (eds.) The Military and Democracy (Lexington: Lexington Books, 1990), 150.

1. The Beagle Channel[36]

The three Beagle islands of concern are normally uninhabited.[37] In late 1978, Argentina and Chile nearly went to war over the claim to the islands. Both countries want these islands because each believes that they support Antarctic access. The roots of the conflict are partially based on Chile's claim that it had been cheated out of Patagonia when the Argentine-Chilean border was fixed. Another reason Chile wants them is because they give Chile a clear access to the Atlantic Ocean. To Argentina, this violates the long standing bi-oceanic principal with Argentina as the keeper of the Atlantic and Chile the keeper of the Pacific. Also at issue is where the boundary between the two oceans should be delimited.

Before open hostilities erupted, Argentina requested that the Vatican negotiate a demilitarized zone and this effectively defused the immediate crisis, although the dispute continued.

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[36]Unless otherwise indicated, source for this subsection is Child(85), 77-84. See also Robert L. Scheina, Latin America: A Naval History (Annapolis: Naval Institute Press, 1987), 184-187.

[37]The three primary islands are Nueva, Picton, and Lennox; there are also three secondary islands that figure in the dispute: Evout, Barnevelt, and Deceit.

Chile did not openly support Argentina during the 1982 Malvinas war.[38] This created increased tensions between the countries. Finally, in 1985, Argentina and Chile signed the Vatican-mediated Treaty of Peace and Friendship that granted the disputed islands to Chile, but limited Chile's Atlantic claims that one would expect from owning the islands in order to preserve the bi-oceanic principle.[39]

Recently, there have been signs of easing tensions between the two countries over the islands.[40] Jack Child notes, however, that

> an important group of highly nationalistic Argentine geopolitical writers continues to insist that the issue is not dead, that Argentina was cheated, and that the geopolitical implications of the problem for Argentina's

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[38]During the war, a British helicopter crashed in Chilean territory, proving to many Argentines that Chile was collaborating with Britain.

[39]Chile's sovereignty was extended south from the islands to Cape Horn. Chile also gained maritime jurisdiction over a 12 nm zone surrounding the islands, in which Argentina would only be able to exercise free navigation. Argentina was given maritime jurisdiction outside the 12 nm, thus preserving its control over the Atlantic area near the islands as well as jurisdiction over the eastern mouth of the Strait of Magellan. See G. Pope Atkins, Latin America in the International Political System (Boulder: Westview Press, 1989), 317.

[40]In July 1989, the Chilean and Argentine navies held a joint search and rescue exercise in the disputed channel. See Robert L. Scheina, "Latin American Navies," United States Naval Institute Proceedings, March 1989 [hereinafter "Scheina(89)"], 128. The two countries also recently reached an historic reconciliation that settled 23 long-standing border disputes. See "Aylwin and Menem to Sign Border Accord," Financial Times, 01 August 1991.

Antarctic and South Atlantic interests cannot be set aside.[41]

In sum, the Beagle Island dispute, although officially resolved, could still be a potential zone of conflict in the future.

Because the Beagle Islands and Beagle Channel are located adjacent to the Magellan peninsula, the type of navies needed to defend them would need to be coastal and perhaps brown-water capable.

2. The Malvinas Islands[42]

The country that possesses these South Atlantic islands is in a strong position to project power into the South Atlantic and Antarctica. Control of the Malvinas strengthens sovereignty claims and increases a country's influence in the area.[43]

Argentina's military government was in political and economic trouble when it initiated the 1982 war with Britain. It hoped that the war would preoccupy citizens who were becoming restless. The strategy was to rally the

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[41]See Child(90), 154.

[42]Background for section adapted from Child(85), 112-122; and Atkins, 313-317.

[43]For a detailed discussion concerning British and Argentine geopolitics surrounding the Malvinas conflict, see Leslie W. Hepple, "The Geopolitics of the Falklands/Malvinas and the South Atlantic: British and Argentine Perceptions, Misperceptions, and Rivalries," in Kelly and Child, 223-236.

country around a historically frustrating situation. The British have controlled these islands since 1832. Beginning with Juan Perón in the 1940s, the Malvinas have been a patriotic rallying point. Argentines have viewed possession of the islands as necessary in order for the country to fulfill its destiny of greatness.

The Argentine navy did not fare well in the conflict.[44] The cruiser General Belgrano was sunk by British submarine-fired torpedoes and the ex-United States Guppy class diesel submarine Santa Fe was attacked by shore-based helicopters and ended up beached. After these two losses, the navy retired to secure coastal waters and the rest of the navy's wartime participation was limited to naval air operations.[45]

The Malvinas Island are located about 300 nautical miles from the Argentine mainland. Both a viable brown and blue water navy are required to project power into the area for extended periods. Subsequent to the 1982 conflict, Britain has established a 150 nautical mile protective zone around the islands in which all Argentine military and

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[44]For an excellent account of the military aspects of the war, see Max Hastings and Simon Jenkins, The Battle For the Falklands (New York: W.W. Norton & Company, 1983).

[45]See Scheina, Latin America: A Naval History 1810-1987, 253.

civilian ships and aircraft are forbidden.[46] Tensions have eased somewhat as Britain has recently moved to reestablish military ties, largely due to Argentina's Gulf War participation. An Argentine naval attaché has been restationed in London and Britain is again making available supply parts for British-made naval equipment.[47]

3. South Atlantic[48]

The strategic importance of the South Atlantic[49] increased significantly since 1970 for two main reasons.[50] First, it was used increasingly by supertankers bringing oil around Cape Horn.[51] Second, the Soviets expanded their West

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[46]See Robert L. Scheina, "Latin American Navies," United States Naval Institute Proceedings, March 1987 [hereinafter "Scheina(87)"], 36.

[47]See Jimmy Burns and David White, "Argentina and Britain Resume Military Links," Financial Times, 23 March 1991.

[48]Background for this subsection derived from Child(85), 122-130.

[49]For a detailed analysis see Carlos de Meira Mattos, "The Strategic Importance of the South Atlantic," in Kelly and Child, 214-222.

[50]For a discussion on the South Atlantic's importance to the United States vis-à-vis its policy towards the Southern Cone, see Lars Schoultz, National Security and United States Policy Toward Latin America (Princeton: Princeton University, 1987), 195-199.

[51]For a world perspective on the shift in oil supply routes, see Geoffrey Kemp, "The New Strategic Map," Survival, March/April 1977, 52 and 54-55.

African presence to include Angola.[52] Proposals for developing a South Atlantic Treaty Organization (SATO) to counter the Soviet South Atlantic threat were never fruitful.[53] Argentina was the strongest Latin American proponent of SATO, but Brazil withheld support because of South Africa's Apartheid government.[54] The recently-signed peace agreement in Angola and the imminent fall of Apartheid in South Africa have yet to prompt any renewed interest in a SATO-type organization.

Jack Child describes the South Atlantic's military significance to the Southern Cone:

> It is an important arena in which to project power in an attempt to secure expanded exclusive economic zones and improve their Antarctic claims. The navies, in particular, have a strong vested interest in focusing national attention into these areas since it gives them a justification for expanding their roles and their budget and equipment demands.[55]

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[52]For a discussion on the Soviet presence in the South Atlantic and Antarctica, see A.J. Tellis, "Latin America's Navies: A Strategic Survey," Naval Forces, Vol. 8 No. 2 1987, 216.

[53]SATO membership would have included Argentina, Brazil, Chile, and South Africa. The SATO concept was derived as a supplement to the North Atlantic Treaty Organization (NATO) which only covered Atlantic waters south to the tropic of Cancer. The SATO subject is occasionally revived by Southern Cone geopolitical analysts. There does exist a sub-regional organization, the South Atlantic Maritime Regional Command (CAMAS) comprised by Argentina, Brazil, Paraguay, and Uruguay. Its influence is confined to coastal shipping routes. See Child(85), 124.

[54]Pamela J. McNaught, The United States, the South Atlantic, and Antarctica: Interests and Challenges (Monterey: Naval Postgraduate School Thesis, 1990), 33.

[55]Child(85), 127.

The collapse of the Soviet Union has decreased the external maritime threat to the South Atlantic. In 1986, the General Assembly of the United Nations declared the South Atlantic to be a zone of peace and cooperation.[56] A naval capability is still required, however, to ensure future regional conflicts in South America and southern Africa do not disrupt maritime trade.

In order to effectively project power into the South Atlantic, a blue water navy is required. A resupply capability is especially relevant to sustained operations on the high seas.[57]

4. Antarctica[58]

The Antarctic Treaty is the prevailing document concerning international conduct on the continent. It could have been, but will not, be revised in 1991. A revision conference would have been convened if any of the

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[56]This declaration was largely due to Brazilian diplomatic efforts. See Eduardo I. Pesce, "Brazil's Navy Must Wait," United States Naval Institute Proceedings, March 1987 [hereinafter "Pesce(87)"], 138.

[57]See Morris, Expansion of Third World Navies, 215-228.

[58]Background for this section derived from Child(85), 131-143. Perhaps the most authoritative work on the subject to date is Jack Child, Antarctica and South American Geopolitics: A Frozen Lebensraum (New York: Praeger, 1988) [hereinafter "Child(88)"]. See also Jack Child, "South American Geopolitics and Antarctica: Confrontation or Cooperation?," in Kelly and Child, 187-202; and Margaret L. Clark, "Cooperation on Ice: The Potential of Collaboration in the Southern Cone," in Kelly and Child, 203-213.

consultative parties had called for changes to the original treaty.[59] The Antarctic continent and surrounding waters are rich in resources, including krill, oil, natural gas, minerals and fresh water.[60] It is also located in a strategic position near several of the world's straits, including the Drake passage.

Open hostilities have already occurred. In 1983, Brazil mounted its first Antarctic expedition.[61] The expedition was intercepted by both Argentine warships and

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[59]The Antarctic political administration is divided into four groups: (1) the twelve original consultative parties who have had an historical presence and see themselves as the principal powers in future negotiations. Both Argentina and Chile belong to this group; (2) later consultative parties signed the treaty after 1961; (3) acceding parties have signed the treaty but have not yet qualified to become consultative members. Brazil is an acceding member; and (4) seven claimants among the twelve original consultative members that hold pre-treaty claims. See Child(85), 133-134; also Atkins, 340-342. For a detailed discussion of the Antarctic Treaty, see Jeffrey D. Myhre, The Antarctic Treaty System: Politics, Law, and Diplomacy (Boulder: Westview, 1986).

[60]The United Nations recently endorsed a ban on future mining in Antarctica. Currently, there are no commercial mining ventures underway or scheduled. Forty-five countries, including all three ABC nations and the United States, were purposely absent to show their resistance towards any moves to give the U.N. the final authority to decide on the future of the continent. See Rodolfo A. Windhausen, "UN Endorses Ban on Mining," The Times of the Americas, 26 December 1990, 30. For more on how the Antarctic Treaty addresses protection of marine environment and minerals, see Gillian D. Triggs (ed.), The Antarctic Treaty Regime: Law, Environment and Resources (Cambridge: Cambridge University, 1987).

[61]It was important that Brazil, as only an acceding party, conduct a mission because the terms of the 1961 treaty stipulate that only countries that have sent at least one expedition by 1991 will be allowed to attend future treaty negotiations.

British fighter aircraft before it finally entered Antarctic waters.

In October 1991, a development occurred that may serve to defuse future conflicts over the right to exploit Antarctic resources. After two years of negotiations, twenty-six nations signed a fifty-year ban on oil exploration and mining on the continent. The convention designates Antarctica as a natural reserve. It also specifies that its delicate ecology should be protected and establishes ways to judge the impact of human activity on the continent. These bans will not officially take effect, however, until all twenty-six signing nations ratify the document, which is expected to take at least two years.[62] As world resources dwindle, the future possibility exists that a resource-poor country may challenge this ban militarily.

In order to maintain SLOCs open from the ABC countries to Antarctica, both a brown and a blue water navy is required.

5. South Pacific

Chile envisions itself as a South Pacific power. It considers that the South Pacific, from Easter Island to its

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[62]Richard Lorant, "Antarctic Pact Puts Continent Off Limits to Oil Drilling, Mining," Monterey Herald (Associated Press), 05 October 1991, 2A.

coast, is a Chilean Sea or Chilean Lake.[63] Chile's main challenger to this claim is Peru, a rivalry dating back to the War of the Pacific.[64] Recent Chilean geopolitical writings warn of the dangers of Soviet and Cuban naval penetration of the South Pacific region.[65]

The current probability of conflict in the South Pacific is low. Peru, Chile's most likely threat, is too preoccupied with internal crises to challenge Chilean naval power. A general criticism of Chilean South Pacific geopolitical writing is that it exaggerates the strategic value of one of the least trafficked segments of all oceans.[66]

As the only Southern Cone country to have a significant interest in the South Pacific, Chile needs brown and blue water naval capability. This level of maritime force is necessary to project power from the Chilean coast to Easter Island, some 2,300 nm in distance.

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[63]See Child(88), 165.

[64]Peru has the largest and most sophisticated submarine force in Latin America.

[65]See Child(90), 154.

[66]See Caviedes in Kelly and Child, 22.

6. Exclusive Economic Zone and Law of the Sea[67]

As early as 1947, Chile had laid claims to a 200 nm off-shore territorial limit. Together with Ecuador and Peru, Chile issued a declaration in 1952 stating that the rationale for the limit was that

> offshore food and economic materials were essential national resources and that they had the right and duty to protect and regulate them against outside exploitation.[68]

Brazil joined Chile in declaring its own EEZ shortly afterward. In 1982, all three ABC countries ratified the Law of the Sea Convention that establishes a 200 nm EEZ for coastal nations, including a clause concerning oil-drilling rights.[69] It regulates shipping lanes and provides for rights of passage for civilian and military ships through straits, and guarantees free navigation for naval forces. This includes Brazil's concern for keeping the Amazon waterway system open. Also, the law limits seabed mining and exploitation of fishing areas.[70]

Conflict over EEZs has a historical basis within the Southern Cone. In 1963, Brazilian warships seized three

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[67]For an overview of Third World naval interest in the EEZ, see Harold J. Kearsley, "The Small Navy's Role," Navy International, October 1988, 466-467.

[68]Atkins, 343.

[69]For a detailed discussion of the EEZ, see Morris, Expansion of Third World Navies, 132-143; also Geoffrey Till, Modern Sea Power (London: Brassey's, 1987), 18-21.

[70]Atkins, 345-346.

French lobster boats sixty miles off the Brazilian coast. In response, France sent a destroyer and Brazil countered with a cruiser, five destroyers and two corvettes.[71] A compromise was reached before actual shots were fired. Also, in 1966, an Argentine destroyer shot and hit a Russian trawler when the trawler disobeyed naval instructions. Between September and October 1977, the Argentine navy engaged Soviet and Bulgarian trawlers with guns, resulting in some casualties.[72]

Of the six conflict areas examined, the EEZ probably has the most potential for future confrontation. In order to adequately protect and project power throughout the 200 nm zone, a country requires all three types of navies: coastal, brown and blue water.

Of the other five areas of conflict discussed, the probability of future conflict is highest in Antarctica, followed by the Beagle Channel, the Malvinas Islands, the South Atlantic and the South Pacific. As political relations between belligerents improve, conflict in the Beagle Channel and Malvinas Islands becomes less likely. Successful long-term SLOC interdiction of the South Atlantic and South Pacific could only be realistically accomplished by the United States Navy, although regional conflicts may

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[71]These confrontations are now known as the "Lobster wars." See Scheina, Latin American: A Naval History, 182.

[72]Ibid., 182-183.

temporarily interrupt trade. In sum, the traditional geopolitical conflicts of the Southern Cone are becoming less likely to be areas of contention in the future, although none of the conflicts discussed is completely resolved.

This chapter has surveyed six potential areas of maritime conflict in the southern cone. By combining the geopolitical doctrines and the potential areas of conflict for each of the ABC countries, the type of navy each country requires can easily be determined. Table II.B-2 summarizes the type of navy each country needs for each of the seven main interest areas.

TABLE II.B-2
TYPES OF NAVIES REQUIRED BY PRIMARY
SOUTHERN CONE MARITIME GEOPOLITICAL INTERESTS
(In order of decreasing probability of future conflict)

GEOPOLITICAL INTEREST	PRIMARY INTEREST OF: ARG	BRZ	CHL	TYPE OF NAVY REQUIRED
1. EEZ	yes	yes	yes	coastal/brown/ blue
2. Antarctica	yes	yes	yes	brown/blue
3. Beagle Channel	yes	no	yes	coastal/brown
4. Malvinas Islands	yes	no	no	brown/blue
5. South Atlantic	yes	yes	no	blue
6. South Pacific	no	no	yes	blue

Source: compiled by author

III. SOUTHERN CONE NAVIES AND SHIP ACQUISITIONS, 1980-1990

This chapter examines the navies of each of the Southern Cone countries. It begins by looking at the type of navy present in 1980 and then tracks naval ship acquisitions, domestic shipbuilding, and ships decommissioned over the decade. It then studies the type of navy each country had in 1990 and analyzes the changes between the 1980 and 1990 navies. After checking on any planned acquisitions or domestic shipbuilding in progress, a matrix is employed to determine and rank the types of ships each country needs to acquire to make its navy consistent with stated geopolitical interests.[73]

A. ARGENTINA

1. Argentine Navy, 1980

Argentina's navy in 1980 was one of the strongest third world navies. Morris places it among only four regional force projection navies in the third world.[74] On paper, it qualified as a blue water navy. It was a very old fleet, however. It had one aircraft carrier commissioned in the 1940s, one cruiser of pre-World War Two vintage, and

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[73]For a general overview of the needs of Third World navies, see Christopher Dawson, "Changing Requirements of Third World Navies," International Defense Review, October 1986, 1477-1486.

[74]See Morris, Expansion of Third World Navies, 34.

seven destroyers with a hull life of thirty-two years or more. In all, sixty-one percent of its fleet had been commissioned before 1950.

Subsequent to World War Two, the Argentine Navy was dependent on United States military assistance. By 1980, fifty-two percent of its ships were originally from the American navy. Most of these were considered obsolete by the United States before they were transferred.[75] Only thirteen percent were from Argentine shipyards. Table III.A-1 summarizes the Argentine navy of 1980.

[75]Note that obsolescence only means that the technology present in these ships had been surpassed by what was available at the time; it does not necessarily mean that the platforms were incapable of performing their missions.

TABLE III.A-1

ARGENTINE NAVY, 1980

NAVAL FORCE PERSONNEL:	30,930
Officers:	2,890
Petty Officers:	16,040
Conscripts:	12,000

ACTIVE NAVAL FLEET: 46	
PRINCIPAL COMBATANTS: 17 (37%)	
Submarines:	4 (4f)
Aircraft Carrier	1 (1f)
Cruiser	1 (1f)
Destroyers	9 (8f, 1fc)
Frigates	2 (2f)
PATROL AND COASTAL COMBATANTS: 19 (41%)	
Patrol Ships	8 (3d, 5f)
Fast Attack Craft (Gun)	2 (2f)
Fast Attack Craft (Torp.)	2 (2f)
Coastal Patrol Craft	4 (4f)
Large Patrol Craft	3 (1d, 2f)
AMPHIBIOUS: 5 (11%)	
Landing Ships (Tank)	4 (1d, 3f)
Landing Ship (Dock)	1 (1f)
SUPPORT: 5 (11%)	
Tankers (Fleet Support)	3 (1d, 2f)
Icebreakers	2 (2f)

SHIP SOURCES BY COUNTRY[a]		COMMISSIONING DATE	
United States	52%	1980	2%
Argentina	13%	1970s	30%
Germany	11%	1960s	0%
Israel	9%	1950s	7%
Britain	7%	1940s	54%
France	4%	1930s	7%
Finland	2%		
Spain	2%		

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

[a]includes both f and fc

Source: adapted from John Moore (ed.) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 23-33.

2. Argentine Ship Acquisitions, 1980-1990

Argentina successfully procured five different ship types from foreign sources during the 1980s. Germany delivered ten of the twelve total units contracted. Additionally, Germany has six vessels under contract for future delivery.

Germany delivered the first of two TR 1700 SS units in December 1984. Four additional units are under contract for domestic construction. The Domceq Garcia shipyard's construction program for these $200 million vessels was already more than two years behind schedule in early 1989.[76] These submarines close the gap between the older generation of diesel boats and the newer nuclear-powered attack submarines.[77] One observer's view of these boats:

> Beyond any doubt, the TR1700...is a "diesel submariner's dream," as it is vastly superior to any other conventional submarine currently in service and possesses operational characteristics close to those of a nuclear submarine.[78]

The addition of these vessels clearly elevates Argentina's submarine force capabilities over its older 1970s vintage Balta- Class Type 209 diesel submarines.

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[76]See Joe Schneider, "Crisis in Argentina's Forces," Jane's Defence Weekly, 29 April 1989, 745.

[77]See Robert L. Scheina, "Latin American Navies", United States Naval Institute Proceedings, March 1985 [hereinafter "Scheina(85)"], 35.

[78]See Keith E. Wixler, U.S. Navy, "Argentina's Geopolitics and Her Revolutionary Diesel-Electric Submarines," United States Naval War College Review, Winter 1989, 86.

Germany also constructed and delivered four MEKO 360 type destroyers (the last unit was delivered in April 1985). These are gas-turbine propelled, and carry Exocet surface-to-surface missiles (SSM), five inch guns, and torpedoes. They normally carry SA319B Alouete helicopters for ASW and ASUW missions.

France delivered the last of three type A69 diesel powered frigates in July 1981.[79] These are outfitted with Exocet SSM, 3.9 inch guns, torpedoes and hull-mounted sonar.

Four MEKO 140 diesel frigates were constructed in Rio Santiago under contract from Germany. The ships were commissioned between 1985 and 1990. Two more units are under domestic construction.[80] These vessels carry Exocets, one three inch gun, torpedoes, and medium frequency hull-mounted sonar and are mostly used for EEZ patrol duties.

A United States-constructed oil rig support tug was purchased from the U.S. maritime Administration in 1987 for use as a survey and oceanographic patrol ship. The significance of this transfer is that it signals the reopening of equipment deliveries to Argentina from the

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[79]The first two were originally built for the South African navy, but were purchased instead by Argentina following the world-wide embargo on arms sales to South Africa.

[80]Budget restrictions have recently forced construction of these last two units to be suspended. It is likely these vessels will only be completed if a foreign buyer can be found for them. See David Foxwell, "World Warshipbuilding: The Decade of the Multipurpose Combatant," International Defense Review, August 1991, 852.

United States. Table III.A-2 summarizes Argentine ship acquisitions during the 1980s.

TABLE III.A-2
ARGENTINE SHIP ACQUISITIONS, 1980-1990

SUBMARINES
TR 1700 Type (Diesel)--GERMANY
(2) German built-delivered in 1984, 1985
(4) Under contract for domestic construction

DESTROYERS
MEKO 360 Type (Gas Turbine)--GERMANY
(4) German built-delivered in 1983, 1984

FRIGATES
Type A69 (Diesel)--FRANCE
(1) French built-delivered in 1981

MEKO 140 Type (Diesel)--GERMANY
(4) Domestically constructed (foreign contract)

1985-1990
(2) Under contract for domestic construction

PATROL SHIPS
Teniente Class (Diesel)--UNITED STATES
(1) United States built-delivered in 1987

SUMMARY

12 Vessels delivered		6 Vessels under contract	
Germany	10	Germany	6
France	1		
United States	1		

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 9-16.

3. Domestic Naval Ship Construction, 1980-1990

There were no domestic programs other than those mentioned in part two (construction of foreign-designed vessels).

4. Ships Decommissioned or Lost, 1980-1990

The Argentine navy decommissioned and lost a total of twenty-four craft during the decade. The most significant was the loss of the sole Argentine cruiser, General Belgrano, to a British submarine-launched torpedo. Seven old U.S.-constructed destroyers were mothballed.[81] One area that has been degraded is Argentina's support ship and oil tanker inventory. Without the ability to refuel at sea, a navy with blue water potential is relegated to brown water status at best. Table III.A-3 summarizes the ships removed from service during the 1980s.

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[81]Not included in the analysis was the loss of the polar transport Bahia Paraiso in January 1989. The vessel struck a submerged rock in the Straits of Bismarck and sustained severe damage. The ship had limited ice-breaking capability and was used during the Malvinas war as a hospital ship. See Robert L. Scheina, "Latin American Navies," United States Naval Institute Proceedings, March 1990 [hereinafter "Scheina(90)"], 111.

TABLE III.A-3
ARGENTINE SHIP DECOMMISSIONINGS AND WARTIME LOSSES, 1980-1990

VESSEL TYPE		CLASS	COMMISSIONED
SUBMARINES[a]	(2)	Ex-US "Guppy"	1945
CRUISER[b]	(1)	Ex-US "Brooklyn"	1939
DESTROYERS	(3)	Ex-US "Fletcher"	1943
	(3)	Ex-US "Allen M. Sumner"	1944
	(1)	Ex-US "Gearing"	1945
PATROL SHIPS	(1)	Ex-US "Sotoyomo"	1943
	(1)	Argentine "Bouchard"	1938
FAST ATTACK	(2)	Ex-US "Higgins"	1946
LARGE PATROL	(1)	Argentine-built	1951
	(1)	Ex-US 63ft AVR	NA
	(1)	Spanish built	1977
LSTs	(3)	Ex-US	1945
LSD	(1)	Ex-US	1943
TANKERS	(1)	US built	1950
	(1)	Ex-US "Klickitat"	1945
	(1)	Argentine built	1938

[a]Santa Fe destroyed in Malvinas war
[b]General Belgrano sunk in Malvinas war

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 9-16.

5. Argentine Navy, 1990

The main mission of the 1990 Argentine navy is exercising local sea control in sea areas contiguous to the mainland.[82] The aircraft carrier Veinticinco de Mayo began an overhaul in 1988. Its steam plant is to be replaced by a diesel propulsion system. The original two-year shipyard period has been extended and the program has reportedly experienced budgetary delays.[83] Nevertheless, modernization of this vessel remains the Argentine navy's top priority.[84]

The naval and armed forces budgets experienced a general decline over the decade.[85] In his first defense budget, President Carlos Menem in 1989 appropriated over half of the $580 million total to the air force, even though the army had traditionally received the largest portion, followed by the navy.[86] Menem recently declared that all funds raised through the privatization of defense corporations will be set aside for the armed forces.[87]

[82]See Tellis, 214.

[83]If completed, the ship's new top speed will be approximately 25 knots, fast enough to launch the Super Entendard attack aircraft that are replacing aging A-4 Skyhawks. See Scheina(90), 111; Jane's Defence Weekly, 22 October 1988, 999.

[84]See Jane's Defence Weekly, 05 January 1991, 6.

[85]Military spending dropped from an average of 4.3 percent gross national product (GNP) in the early 1980s to 2.5 percent in 1989. See Schneider, 745.

[86]See Scheina(90), 111.

[87]Jane's Defence Weekly, 05 January 1991, 6.

Severe financial problems have forced Argentina to offer two of the locally built TR 1700 submarines for sale.[88] Argentina's two British-made Type 42 destroyers have been up for sale for several years due to an inability to acquire spare parts from Britain, but there have been no buyers as yet.[89] Perhaps the most serious ramification of a shortage of naval funds is that Argentine ships are not getting sufficient time at sea. Budgetary restrictions have limited major units to two weeks sea time per year since 1984.[90]

Argentina had several ships deployed at the end of 1990. The frigates Almirante Brown and Spiro were part of the U.S.-led blockade of Iraq.[91] Also, all four of its Israeli Dabur- class patrol boats are loaned to the United Nations peacekeeping force in Nicaragua.[92]

Argentina's off-and-on nuclear submarine program is apparently back on. It is possible that two Type 209/1200

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[88]See Navy International, December 1990, 441.

[89]See Schneider, 746. Rumors have been floating around that Brazil may be interested in these craft, although it is somewhat doubtful given their reportedly poor condition. See Navy International, September 1988, 413.

[90]Adrian J. English, "Latin American Navies In Recession," Naval Forces, Vol. 11 No. 2 1990 [hereinafter "English(90)"], 105.

[91]See Tim Golden, "Argentine Leader Sees Gulf Role As Best Way to Reverse Old Image," The New York Times, 01 October 1990, A12; and Robert L. Scheina, "Latin American Navies," United States Naval Institute Proceedings, March 1991 [hereinafter "Scheina(91)"], 89.

[92]Scheina(91), 89.

boats are being modified to accept a nuclear propulsion plant.[93]

With its aircraft carrier incapacitated for an indeterminate period, and due to austere funding, Argentina's navy has degraded from a blue water navy in 1980 to a brown water navy at best in 1990. Of major significance is its total lack of tankers. The amphibious force has shrunk down to a single LST. Through substantial decommissionings, Argentina has reduced the average age of its fleet. Currently, 78 percent of the fleet was commissioned after the 1960s. Germany has become its biggest supplier of naval vessels, accounting for 42 percent of the 1990 fleet. Table III.A-4 summarizes the Argentine navy of 1990. Table III.A-5 compares the 1980 and 1990 fleets.

[93]See English(90), 105.

TABLE III.A-4

ARGENTINE NAVY, 1990

NAVAL FORCE PERSONNEL:	22,000	
Officers:	2,800	
Petty Officers:	15,200	
Conscripts:	4,000	
ACTIVE NAVAL FLEET:	33	
PRINCIPAL COMBATANTS:	18 (55%)	
Submarines		4 (4f)
Aircraft Carrier		1[a] (1f)
Cruisers		0 ----
Destroyers		6 (5f, 1fc)
Frigates		7 (3f, 4fc)
PATROL AND COASTAL COMBATANTS:	13 (39%)	
Patrol Ships		7 (2d, 5f)
Fast Attack Craft (Gun)		2 (2f)
Fast Attack Craft (Torpedo)		0 ----
Coastal Patrol Craft		4 (4f)
Large Patrol Craft		0 ----
AMPHIBIOUS:	1 (3%)	
Landing Ship (Tank)		1 (1d)
Landing Ship (Dock)		0 ----
SUPPORT:	1 (3%)	
Tankers (Fleet Support)		0 ----
Icebreakers		1 (1d)

SHIP SOURCES BY COUNTRY[b]		COMMISSIONING DATE	
Germany	42%	1990	3%
Argentina	15%	1980	39%
United States	15%	1970s	36%
Israel	12%	1960s	0%
Britain	9%	1950s	0%
France	9%	1940s	21%
		1930s	0%

[a]Has not been fully operational since 1985

[b]Includes both f and fc

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ship's, 1990-1991 (Surrey: Jane's, 1990), 9-16.

TABLE III.A-5
ARGENTINE NAVY, 1980-1990: A COMPARISON

NAVAL FORCE PERSONNEL 1980: 30,930; 1990: 22,000

VESSEL TYPE	1980	TRANSFERS	DECOM[a]	1990
Submarines	4	2	2	4
Aircraft Carrier	1	0	0	1
Cruiser	1	0	1	0
Destroyers	9	4	7	6
Frigates	2	5	0	7
Patrol Ships	8	1	2	7
Fast Attack (Gun)	2	0	0	2
Fast Attack (Torp)	2	0	2	0
Coastal Patrol	4	0	0	4
Large Patrol Craft	3	0	3	0
Landing Ship (Tank)	4	0	3	1
Landing Ship (Dock)	1	0	1	0
Tankers	3	0	3	0
Icebreakers	2	0	1	1
TOTALS	46	12	25	33

SHIP SOURCE BY COUNTRY (percent)

1980		1990	
United States	52	Germany	42
Argentina	13	Argentina	15
Germany	11	United States	15
Israel	9	Israel	12
Britain	7	Britain	9
France	4	France	9
Finland	2		
Spain	2		

[a]includes vessels destroyed during Malvinas war

Source: adapted from John Moore (Ed) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 23-33; and Richard Sharpe (Ed) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 9-16.

6. Shipbuilding and Planned Acquisitions

Argentina would like to sell some of its indigenously built MEKO Type 140 frigates or TR 1700 submarines to help establish its shipbuilding industry. Currently, there are no ongoing shipbuilding programs in progress other than those under foreign contract discussed previously.[94]

7. Needs of the Argentine Navy

As previously established, Argentine geopolitical doctrine requires a viable blue water navy. The purpose of this section is to subjectively evaluate the various types of ships needed by the navy without regard to cost (See Table III.A-6). Levels of need are differentiated by assigning numerical values to ship types. Types that are most needed are assigned a plus two; those vessels that are the least needed at the current time, are assigned minus two; for degrees of need that fall in between the values of plus one, zero, and minus one are assigned. These values, called the Geopolitical Need (GN), are used at the end of Part One to help determine which U.S. ships, that are to be decommissioned, may be desired by Argentina.

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[94]Argentina has stated it is interested in purchasing U.S. built SH-2G Sea Sprite helicopters for its MEKO 360 class frigates, a purchase that would require Congressional approval. Also, the MEKO's hangars would have to be extended to accommodate the SH-2G. See Scheina(91), 89.

TABLE III.A-6
SHIP TYPES NEEDED BY ARGENTINA TO ACHIEVE BLUE WATER NAVY

	GEOPOLITICAL NEED (GN)				
SHIP TYPE	+2	+1	0	-1	-2
SS			X		
CV	X				
BB	X				
C,CG	X				
DD,DDG			X		
FF,FFG			X		
Coastal Patrol				X	
Amphibious		X			
Support	X				

Source: author

As Table III.A-6 indicates, Argentina needs a new aircraft carrier (even if Veinticinco de Mayo finishes modernization, which is doubtful at this point, the ship may not make it into the next decade because of its age). Since losing its one cruiser in the Malvinas, Argentina has needed a replacement. Finally, the navy's almost complete lack of oiler support jeopardizes even extended brown water power projection.

B. BRAZIL

1. Brazilian Navy, 1980

Brazil's navy of 1980 was similar in composition to Argentina's at the time. It, too, had an aging aircraft carrier, although it lacked a cruiser. Its navy was largely comprised of second-hand U.S. navy vessels; 47 percent of

the fleet was U.S. built.[95] An indicator of the fleet's age is that the commissioning dates of 61 percent of the fleet was before 1960. Brazil's amphibious and tanker support was more modest than Argentina's in 1980. In sum, Brazil's navy in 1980 can be categorized as a very weak blue water navy.[96]

Table III.B-1 summarizes the 1980 Brazilian navy.

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[95]In the early 1960s, Brazil found it difficult to acquire modern armaments from the United States. This led to Brazil's move away from military dependence on the U.S. and towards producing its own indigenous arms industry. See Ferreira, 24.

[96]One naval leader acknowledged after the Malvinas war that Brazil's navy was unprepared to fight a similar war. "If the Brazilian navy got involved in war like that of the Malvinas, it would be sunk in two days." Admiral Fonseca, quoted in Hilton, 338.

TABLE III.B-1

BRAZILIAN NAVY, 1980

NAVAL FORCE PERSONNEL:	45,500[a]
Officers:	3,900
Enlisted:	41,600

ACTIVE NAVAL FLEET: 53	
PRINCIPAL COMBATANTS: 27 (51%)	
Submarines	8 (8f)
Aircraft Carrier	1 (1f)
Destroyers	12 (12f)
Frigates	6 (4f,2fc)
PATROL AND COASTAL COMBATANTS: 22 (42%)	
Coastal Patrol Ships	10 (10f)
River Monitor	1 (1d)
River Patrol Ships	5 (5d)
Large Patrol Craft	6 (6fc)
Coastal Patrol Craft	0 ----
AMPHIBIOUS: 2 (4%)	
Landing Ships (Tank)	2 (2f)
Landing Ship (Dock)	0 ----
SUPPORT: 2 (4%)	
Large Tanker	1 (1d)
Small Tanker	1 (1f)

SHIP SOURCE BY COUNTRY[b]		COMMISSIONING DATE	
United States	47%	1980	0%
Netherlands	21%	1970s	38%
Britain	19%	1960s	2%
Brazil	13%	1950s	21%
		1940s	36%
		1930s	4%

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

[a]figure includes 12,000 marines and auxiliary corps
[b]includes both f and fc

Source: adapted from John Moore (ed.) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 56-65.

2. Ship Acquisitions, 1980-1990

A total of seven vessels were delivered to Brazil during the 1980s. All but one were from the United States. There are currently three units under contract for domestic construction.

One German built 209 Class (Type 1400) SS was delivered in 1988. Brazilian shipbuilders have three more on contract. A German design was selected after intense competition from the British, French, and Italians. The Type 1400, approximately $200 million apiece, is a very capable SS and compares well to the Argentine TR 1700. It can dive down to 820 feet, has a submerged speed of close to 22 knots and an extended range of 12,000 nm.[97]

Four ex-U.S. Garcia-class frigates were leased for five years beginning in 1989 and 1990.[98] These are 1960s vintage ASW platforms that carry ASROC (Anti-Submarine Rocket), two five-inch guns, and a moderately capable bow-mounted sonar.[99] These ships have helicopter accommodations for the SH-2.

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[97]For more details, see Eduardo I. Pesce, "Brazil's Silent Service," United States Naval Institute Proceedings, March 1989 [hereinafter "Pesce(89)"], 64.

[98]Ex-USS Bradley (FF-1041), ex-USS Davidson (FF-1045), ex-USS Sample (FF-1048), and ex-USS Albert David (FF-1050).

[99]It is not clear if the SQR-15 TACTAS (Tactical Towed Array Sonar) was transferred along with the ex-Sample and ex-Albert David (the other two units were not equipped with TACTAS while in the U.S. inventory).

Brazil acquired two ex-U.S. Thomaston-class LSDs in 1989 and late 1990.[100] These "dock landing ships" were commissioned in the mid-1950s as a result of renewed U.S. interest in amphibious operations following the Korean war. The only firepower they have are six-three inch anti-aircraft (AA) batteries. Table III.B-2 summarizes Brazilian ship acquisitions in the 1980s.

[100]Ex-USS Hermitage (LSD-34) and ex-USS Alamo (LSD-34).

TABLE III.B-2
BRAZILIAN SHIP ACQUISITIONS, 1980-1990

SUBMARINES
209 Class (Type 1400) (Diesel)--GERMANY
(1) German built-delivered 1988
(3) Under contract for domestic construction

FRIGATES
Ex-US "Garcia" Class (Steam turbine)--UNITED STATES
(4) United States built-delivered 1989-90
(5 yr lease)

LANDING SHIPS (DOCK)
Ex-US "Thomaston" Class (Steam Turbine)--UNITED STATES
(2) United States built-delivered 1989-90

SUMMARY

7 Vessels Delivered		3 Vessels under contract	
United States	6	Germany	3[a]
Germany	1		

[a]to be built in Brazil

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 51-64.

3. Brazilian Shipbuilding, 1980-1990

Paradoxically, Brazil, a country with significant merchant shipbuilding facilities and a rather large arms export industry, has done relatively poorly in developing its indigenous naval ship building capability. Brazil has not taken advantage of the fact that it owns one of the

largest shipbuilding industry in the world.[101] One of the problems has been the difficulty in convincing private shipyards to interrupt successful merchant ship programs and rearrange its assembly line to satisfy small and sporadic navy orders.[102] One observer describes the dilemma:

> With all the obstacles to producing domestically its materiel, the Brazilian Navy now is heavily dependent on foreign suppliers in spite of the country's large shipbuilding capabilities. Undoubtedly, this dependence is the greatest impediment for the accomplishment of strategies devised to fulfill independent national political objectives.[103]

There was an initiative in the late 1970s to boost domestic naval shipbuilding industries. It demanded that at least 60 percent of construction costs for Brazilian naval programs be spent in Brazil.[104] In effect, this move prompted the navy to seek foreign contract construction programs in order to avoid these types of restrictions on domestically-built ships.

A total of six naval ships were built domestically without foreign involvement. Four 31-ton, diesel-propelled

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[101]Ferreira, 32.

[102]Ibid., 33.

[103]Ibid., 34.

[104]See Frans de Blocq van Kuffeler, "Latin America: A Patchwork of Strengths and Capabilities," in John Moore (ed.) Jane's Naval Review. (London: Jane's, 1982), 27. In 1987, a new emphasis was placed on privatizing national shipyards prompting the naval shipyard at Rio de Janeiro to acquire the capability to build submarines and various specialized vessels. See Martin Cohen, "Brazilian Defense: Full Speed Ahead," Defense & Foreign Affairs, March 1987, 34.

Tracker-class coastal patrol craft were delivered by Astreleiros shipyard, Porto Alegre, by 1989. Initial plans were to construct these lightly armed EEZ patrol vessels at the rate of two per year, but this pace has slowed due to budgetary constraints.

Two tankers were delivered, one 10,000 ton in 1990 and one 1300 ton. The large Almirante Gastao Motta is to replace the aging Marajó, and is fitted for both abeam and astern refueling.[105] Table III.B-3 summarizes Brazilian domestic naval shipbuilding during the 1980s.

TABLE III.B-3
BRAZILIAN NAVAL SHIPBUILDING, 1980-1990

COASTAL PATROL	(4) "Tracker" Class (Diesel)-1989
LARGE TANKER	(1) Gas Turbine-1990
SMALL TANKER	(1) Steam Turbine-1989

Note: table does not include (3) Type 209-class SS being built under German contract.

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 51-64.

4. Ships Decommissioned, 1980-1990

Like Argentina, Brazil mothballed a number of old vessels purchased from the United States. Four Guppy-class

[105]For more details, see Eduardo I. Pesce, "Brazilian Navy Update," United States Naval Institute Proceedings, March 1985 [hereinafter "Pesce(85)"], 186.

diesel submarines, four Fletcher-class destroyers, and one "511-1152" class LST were decommissioned. All these ships were of 1940s vintage. Also, one Dutch-built coastal patrol ship, built in the 1950s, was removed from active service. Table III.B-4 provides a summary of Brazilian ships decommission from 1980 to 1990.

TABLE III.B-4
BRAZILIAN SHIP DECOMMISSIONINGS, 1980-1990

VESSEL TYPE		CLASS	COMMISSIONED
SUBMARINES	(1)	Ex-US Guppy III Type	1946
	(3)	Ex-US Guppy II Type	1945-1946
DESTROYERS	(4)	Ex-US "Fletcher"	1944-1946
LST	(1)	Ex-US "511-1152"	1945
COASTAL PATROL SHIP	(1)	Dutch built "Imperial Marinheiro"	1955

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 51-64.

5. Brazilian Navy, 1990

The navy's main mission responsibility is to guard its 5,000 mile coastline and 200 nm EEZ, with secondary primary missions of keeping both the Atlantic Narrows and the Amazon waterway system open.[106] The Brazilian

[106]See Ludwig, 61.

constitution of 1980 prohibits its armed forces from conducting offensive operations.[107]

The last twenty years has seen a steady decrease in Brazilian defense spending, falling from 5.0 to 0.8 percent of GNP. The 1990 defense budget shrank to an incredibly low 0.2 percent of GNP.[108] In another comparison, Brazil's defense budget has shriveled from 23 percent of the national budget in 1971 to 3.7 percent today.[109] To supplement the Navy's budget, 20 percent of the annual offshore oil royalties, worth about $35 million a year, are diverted to the navy.[110] Three main programs have been identified as priority budget items: modernization of the Niteroi, the purchase of new helicopters, and the development of a SSN.[111]

The Brazilian aircraft carrier, Minas Gerais, was modernized in 1984 but is still not capable of supporting modern jet aircraft. In Brazil, the air force owns and

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[107]Luria, 933.

[108]Scheina(90), 112.

[109]Latin American Weekly Report, 12 September 1991, 3.

[110]See Pesce(87), 134.

[111]Joris J. Lok, "Field Narrows in Niteroi Contest," Jane's Defence Weekly, 10 August 1991, 223; and "Brazil to Acquire Lynx Helicopters," Jane's Defence Weekly, 14 September 1991, 455.

operates all fixed-wing aircraft.[112] Hence, Brazilian battlegroups carry little or no indigenous air defense capability. The navy must rely upon the air force to provide cover only as far as 350 kilometers offshore.[113]

The last Niterói class frigate was delivered from the Rio de Janeiro shipyard in 1980. These craft carry Exocets, Seacat surface-to-air missiles (SAMs), two 4.5 inch guns, torpedoes, and a medium frequency hull-mounted sonar.[114] Priority has been placed on modernizing six of these ships, including enhanced AAW capability. Plans are to replace the Seacat with either the Vertical-Launch Seawolf (UK), the Alenia Aspide (Italy), or the Matra Mistral (Italy). The introduction of any of these three SAM systems would be a first for the region. This program will consume $200-250 million and it is likely that the final number of ships modernized could be as few as two or three.[115] Together

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[112]The navy operates helicopters only as a result of a 1965 presidential decision. The air force adamantly refuses to allow the other services to operate fixed-wing aircraft, making it unlikely the navy will recover its fixed-wing capability in the near future. See Pesce(87), 136.

[113]See Luria, 936.

[114]For a detailed discussion of this class, see Eduardo I. Pesce, "The Brazilian Mk-10 Frigates," United States Naval Institute Proceedings, March 1981, 127-129. In 1989, the navy announced its intent to purchase eight General Dynamics-manufactured Phalanx Mk-15 Mod-II close-in weapon systems (CIWS) for the Niterói-class frigates at a cost of $63 million. See Scheina(89), 128.

[115]Lok, "Field Narrows in Niteroi Contest," 223.

with the recently leased ex-U.S. Garcia-class frigates, these ships give Brazil a solid ASW foundation. However, these units are little match against modern nuclear-powered submarines. Also, Brazil's eastern seaboard is too shallow to deploy an effective Sound Surveillance System (SOSUS) type barrier.[116]

Brazil's sizeable, well-trained Marine Corps lacks amphibious potential due to the navy's shortage of sea lift and assault craft. Its ability to launch amphibious operations, for example, on the West African coast, would be hindered by the lack of sea lift and also the navy's limited cross-oceanic reach.[117] The addition of the two ex-U.S. Thomaston LSDs is a step towards rectifying this situation.

In 1990, the United States was still the supplier for the majority of the Brazilian fleet. That fleet remained an old one, with 43 percent of its ships commissioned before 1960. The navy of 1990 qualifies as a strong brown water navy. It is not a blue water navy because of its limited ability to project power on the high seas for extended periods. Table III.B-5 summarizes the Brazilian navy in 1990. Table III.B-6 compares the fleets of 1980 and 1990.

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[116]See Tellis, 213.

[117]See Luria, 933.

TABLE III.B-5

BRAZILIAN NAVY, 1990

NAVAL FORCE PERSONNEL:	50,000[a]
Officers	5,700
Enlisted	44,300

ACTIVE NAVAL FLEET: 56	
PRINCIPAL COMBATANTS: 24 (43%)	
Submarines	5 (5f)
Aircraft carrier	1 (1f)
Destroyers	8 (8f)
Frigates	10 (8f, 2fc)
PATROL AND COASTAL COMBATANTS: 25 (45%)	
Coastal Patrol Ships	9 (9f)
River Monitor	1 (1d)
River Patrol Ships	5 (5d)
Large Patrol Craft	6 (6fc)
Coastal Patrol Craft	4 (4d)
AMPHIBIOUS: 3 (5%)	
Landing Ship (Tank)	1 (1f)
Landing Ship (Dock)	2 (2f)
SUPPORT: 4 (7%)	
Large Tanker	2 (2d)
Small Tanker	2 (1d, 1f)

SHIP SOURCE BY COUNTRY[b]		COMMISSIONING DATE	
United States	39%	1990	2%
Brazil	23%	1980s	13%
Britain	18%	1970s	34%
Netherlands	18%	1960s	9%
Germany	2%	1950s	21%
		1940s	18%
		1930s	4%

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

[a]figure includes 14,600 marines and auxiliary corps

[b]includes both f and fc

Source: adapted from John Moore (ed.) Jane's Fighting Ships, 1980-1981. (London: Jane's, 1980), 56-65; and Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 51-64.

TABLE III.B-6
BRAZILIAN NAVY, 1980-1990: A COMPARISON

BRAZILIAN NAVY: 1980-1990

NAVAL FORCE PERSONNEL 1980: 45,500; 1990: 50,000

VESSEL TYPE	1980	TRANS-FERS	HOME-BUILT	DECOM	1990
Submarines	8	1	0	4	5
Aircraft Carrier	1	0	0	0	1
Destroyers	12	0	0	4	8
Frigates	6	4	0	0	10
Coastal Patrol	10	0	0	1	9
River Monitor	1	0	0	0	1
River Patrol Ships	5	0	0	0	5
Large Patrol Craft	6	0	0	0	6
Coastal Patrol	0	0	4	0	4
Landing Ships-Tank	2	0	0	1	1
Landing Ships-Dock	0	2	0	0	2
Large Tanker	1	0	1	0	2
Small Tanker	1	0	1	0	2
TOTALS	53	7	6	10	57

SHIP SOURCE BY COUNTRY (percent)

1980		1990	
United States	47	United States	39
Netherlands	21	Brazil	23
Britain	19	Britain	18
Brazil	13	Netherlands	18
		Germany	2

Source: Adapted from John Moore (Ed) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 56-65; and Richard Sharpe (Ed) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 51-64.

6. Shipbuilding Programs and Planned Acquisitions

Three additional 209 class (Type 1400) diesel boats should reach the fleet during the early 1990s. The program is 30 months behind schedule due to insufficient financing.[118]

Despite budgetary difficulties, Brazil still maintains plans to develop a nuclear submarine by 2010.[119] Projected parameters include a 2,700 ton displacement, 25-30 knots submerged, and a 50-megawatt reactor. Brazil already has an operational uranium production plant west of Sao Paulo.[120] Neither Brazil nor Argentina have signed the Nuclear Non-proliferation Treaty.

The navy had planned to build a total of sixteen of the indigenously-designed (with German advice) Inhaúma-class frigates. Two units were delivered in 1991, and only two more are scheduled for delivery.[121] These are designed to replace the ex-U.S. Gearing-class destroyers that remain in the inventory. These $150 million frigates displace 1,600-tons, employ gas turbine propulsion, carry Exocet, one 4.5 inch gun and torpedoes, and have a medium frequency hull-mounted sonar. Their projected mission will be to defend

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[118]See Luria, 936.

[119]Dean Martins, "Running the SSN Race," Jane's Defence Weekly, 13 July 1991, 59.

[120]See Scheina(90), 112.

[121]Foxwell, 852.

both remote and coastal areas as well as to escort coastal and ocean-going convoys.[122] These ships were designed by the Brazilian Naval Design Office with advice from German private assistance.[123]

Most recently, Brazil has expressed an interest in United States destroyers, specifically Charles F. Adams-class DDGs.[124] Also, the navy is looking to procure an icebreaker to support Antarctic scientific missions.[125]

8. Needs of the Brazilian Navy

Like Argentina, Brazil needs a new aircraft carrier to replace the forty-five year old Minas Gerais. The navy also requires a cruiser, a platform they currently do not have. With a 5000 nm coastline, more diesel submarines could be used. Additionally, the amphibious navy could use more ships. Table III.B-7 subjectively ranks ship types needed by the navy, without regard to cost. As before, levels of need are differentiated by assigning numerical values to ship types. Types that are most needed are assigned a plus two; those vessels that are the least needed

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[122]See Luria, 936.

[123]For more background information, see Eduardo I. Pesce, "The Brazilian Modernization Program," United States Naval Institute Proceedings, March 1982, 148.

[124]See Scheina(91), 90.

[125]Luria, 937.

TABLE III.B-7
SHIP TYPES NEEDED BY BRAZIL TO ACHIEVE A BLUE-WATER NAVY

	GEOPOLITICAL NEED (GN)				
SHIP TYPE	+2	+1	0	-1	-2
SS		X			
CV	X				
BB	X				
C,CG	X				
DD,DDG			X		
FF,FFG				X	
Coastal patrol				X	
Amphibious		X			
Support		X			

Source: author

at the current time, are assigned minus two; for degrees of need that fall in between the values of plus one, zero, and minus one are assigned.

C. CHILE

1. Chilean Navy, 1980

Chile's naval fleet in 1980 was predominantly 1940s-vintage, secondhand U.S. navy ships. The fleet's biggest drawback was that it lacked an aircraft carrier. Most of its principal combatants were obsolete. It had a few tankers, but did not have any icebreakers. Only six percent of the navy's ships had been designed and built indigenously. In short, Chile had a brown water navy in 1980. Table III.C-1 summarizes Chile's navy in 1980.

TABLE III.C-1

CHILEAN NAVY, 1980

NAVAL FORCE PERSONNEL:	25,920
Officers:	1,985
Ratings:	23,935

ACTIVE NAVAL FLEET: 32	
PRINCIPAL COMBATANTS: 17 (53%)	
Submarines	3 (3f)
Cruisers	3 (3f)
Destroyers	6 (6f)
Frigates	5 (5f)
PATROL AND COASTAL COMBATANTS: 10 (31%)	
Patrol Ships	3 (3f)
Fast Attack Craft (Missile)	0 ----
Fast Attack Craft (Torpedo)	4 (4fc)
Large Patrol Craft	3 (1d,2fc)
AMPHIBIOUS: 3 (9%)	
Landing Ships (Tank)	3 (3f)
SUPPORT: 2 (6%)	
Tankers	2 (2f)

SHIP SOURCE BY COUNTRY[a]		COMMISSIONING DATE	
United States	56%	1980	0%
Britain	19%	1970s	16%
Germany	13%	1960s	28%
Chile	6%	1950s	0%
Denmark	3%	1940s	50%
Sweden	3%	1930s	6%

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

[a]includes f and fc

Source: adapted from John Moore (ed.), Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 90-97.

2. Chilean Ship Acquisitions, 1980-1990

Chile purchased two German-built 209 class (Type 1300) diesel submarines in the early part of the decade. Two more units were projected in the 1988 five year plan, but the navy may opt for a different type, perhaps the British Oberon-class.

Four ex-British County-class destroyers were delivered between 1984 and 1987. These ships underwent extensive refit by Chilean shipyards prior to commissioning into the Chilean navy. Seaslug launchers were removed in order to extend the helicopter deck so that these vessels can now accommodate AS-332 Super Puma helicopters.[126] At least one unit may have been fitted with a towed array sonar.[127] All units are armed with Exocets, two 4.5 inch guns, torpedoes, and a short-range, high-frequency, hull-mounted sonar. The fourth unit was delivered at a cost of $14 million.[128]

The Chileans purchased a 1959 survey ship from the Dutch that is used as an Antarctic patrol ship. Its hull was reinforced so that it could navigate in ice, but it does not qualify as an icebreaker.

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[126]The navy purchased four French Super Puma and four Dauphin helicopters in 1990 for these ships. See Scheina(91), 93.

[127]See Jane's Defence Weekly, 22 October 1988, 1007.

[128]Scheina(88), 29.

Israel sold a total of four SAAR-class patrol boats to Chile in the early 1980s. Two of the units are SAAR 4 missile attack craft, which are diesel-propelled and armed with Gabriel SSM and two three-inch Italian-made OTO Melara guns. These craft are deployed in the Beagle channel. The other two are SAAR 3 missile attack craft which are smaller than the SAAR 4-class and carry only one three-inch gun. While a part of the Israeli Navy, these units deployed U.S.-made HARPOON missiles. The missiles were removed prior to delivery to Chile because of the 1976 U.S. arms embargo against the government of General Pinochet.

Lastly, one British-made tanker was delivered in 1982 after it served in the Malvinas war. Table III.C-2 summarizes Chilean ship acquisitions in the 1980s.

TABLE III.C-2
CHILEAN SHIP ACQUISITIONS, 1980-1990

SUBMARINES
209 Class (Type 1300) (Diesel)--GERMANY
(2) German built-delivered in 1984

DESTROYERS
Ex-British "County" Class--BRITAIN
(4) British built-delivered in 1984-1987

PATROL SHIP-ANTARCTIC
(Diesel)-Netherlands
(1) Dutch built

FAST ATTACK CRAFT-MISSILE
SAAR 4 Class (Diesel)--ISRAEL
(2) Israeli built-delivered in 1980-1981

SAAR 3 Class (Diesel)--ISRAEL
(2) Israeli built-delivered in 1988

TANKER
(Steam turbine)-BRITAIN
(1) British built-delivered in 1982

SUMMARY

12 Vessels delivered	0 Vessels under contract
Britain	5
Israel	4
Germany	2
Netherlands	1

Source: adapted from Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 95-105.

3. Ships Decommissioned, 1980-1990

Eleven vessels were decommissioned during the decade, with all but one of U.S. construction and pre-1950s vintage. One Brooklyn-class cruiser was mothballed leaving one, the O'Higgins, sister ship to Argentina's General Belgrano, in the fleet. Table III.C-3 summarizes the decommissionings.

TABLE III.C-3
CHILEAN SHIP DECOMMISSIONINGS, 1980-1990

VESSEL-TYPE	CLASS	COMMISSIONED
SUBMARINES	(1) Ex-US "Balao"	1944
CRUISERS	(1) Ex-Swedish "Gota Lejon"	1947
	(1) Ex-US "Brooklyn"	1938
DESTROYERS	(2) Ex-US "Fletcher"	1943-4
FRIGATES	(3) Ex-US "Charles Lawrence"	1943-5
PATROL SHIP	(1) Ex-US "Sotoyomo"	1944
LARGE PATROL CRAFT	(2) Chilean-built	1966-7

Source: adapted from John Moore (Ed) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 90-97; and Richard Sharpe (Ed) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 95-105.

4. Chilean Navy, 1990

Chile has turned its fleet into a superb Latin American navy. What it lacks in quantity it makes up for with well-trained personnel and professional pride. By 1990, the navy was predominately British-made and relatively

new, with 72 percent of the units commissioned in the 1960s and later. Its fifteen principal combatants makes it a borderline brown water navy by definition, but it performs its mission well. Featuring four tankers, the fleet has the potential to operate at sea for extended periods. Its weakest point is the absence of an aircraft carrier and the presence of only one, aging cruiser.[129] Chile's Navy is short in ASW capability with only two frigates. In sum, the navy is small, but effective as a brown water force.

The Chilean defense budget is set by law above a specified minimum floor level. Before Pinochet left office, he passed this legislation and also passed laws guaranteeing significant autonomy to the services over their budgets.[130]

The Leander-class unit Lynch was refitted to accommodate updated Exocet versions, with range extended from 42 to 70 km.[131] The navy plans to fit its surface fleet with the Israeli Barak 1, a 10 km range point defense vertical launch missile system, over an eight year period.[132]

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[129]There had been some discussion in the mid-1980s of possibly converting O'Higgins into a helicopter carrier and then purchasing the former British carrier Hermes, but financial constraint prevented it. See Robert L. Scheina, "The Chilean Navy," United States Naval Institute Proceedings, March 1988, 33.

[130]See Raul Sohr, "Chile's Defenses Open Up," Defense & Foreign Affairs, May-June 1990, 38.

[131]Scheina(91), 90.

[132]See Jane's Defence Weekly, 24 June 1989, 1296.

The Chilean navy, in keeping with its country's South Pacific interests, has quietly established ties to the New Zealand navy. Ships from the New Zealand navy have long used Chilean naval shipyards for major repairs and maintenance.[133]

Also since 1980, the Chilean navy has built up its infrastructure and basing in Tierra del Fuego and in the Beagle Channel region. Chile also has nine (non-military) stations on the Palmer Peninsula of Antarctica.[134] Table III.C-4 summarizes the Chilean navy of 1990 and Table III.C-5 compares the fleets of 1980 and 1990.

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[133]See Adrian J. English, "Defense in Chile," International Defense Review, Vol. 21 No. 2 1988, 138.

[134]See Scheina(87), 38.

TABLE III.C-4

CHILEAN NAVY, 1990

NAVAL FORCE PERSONNEL:	24,700
Officers	2,000
Ratings	22,700

ACTIVE NAVAL FLEET: 34	
PRINCIPAL COMBATANTS: 15 (44%)	
Submarines	4 (4f)
Cruiser	1 (1f)
Destroyers	8 (8f)
Frigates	2 (2f)
PATROL AND COASTAL COMBATANTS: 12 (35%)	
Patrol Ships	3 (3f)
Fast Patrol Craft (Missile)	4 (4f)
Fast Patrol Craft (Torpedo)	4 (4fc)
Large Patrol Craft	1 (1fc)
AMPHIBIOUS: 3 (9%)	
Landing Ships (Tank)	3 (3fc)
SUPPORT: 4 (12%)	
Tankers	4 (1d,3f)

SHIP SOURCE BY COUNTRY[a]		COMMISSIONING DATE	
Britain	32%	1990	0%
Germany	18%	1980s	15%
United States	18%	1970s	26%
Israel	12%	1960s	38%
France	9%	1950s	6%
Denmark	6%	1940s	12%
Chile	3%	1930s	3%
Netherlands	3%		

Key: d-domestic construction
f-foreign construction
fc-domestic construction under foreign contract

[a]includes both f and fc

Source: adapted from Richard Sharpe (ed.), Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 95-105.

TABLE III.C-5
CHILEAN NAVY, 1980-1990: A COMPARISON

NAVAL FORCE PERSONNEL 1980: 25,920; 1990: 24,700

VESSEL TYPE	1980	TRANSFERS	DECOM	1990
Submarines	3	2	1	4
Cruisers	3	0	2	1
Destroyers	6	4	2	8
Frigates	5	0	3	2
Patrol Ships	3	1	1	3
Attack (Missile)	0	4	0	4
Attack (Torpedo)	4	0	0	4
Large Patrol Craft	3	0	2	1
Landing Ships-Tank	3	0	0	3
Tankers	2	2[a]	0	4
TOTALS	32	13[a]	11	34

SHIP SOURCE BY COUNTRY (percent)

1980		1990	
United States	56	Britain	32
Britain	19	Germany	18
Germany	13	United States	18
Chile	6	Israel	12
Denmark	3	France	9
Sweden	3	Denmark	6
		Chile	3
		Netherlands	3

[a]includes one intra-country transfer of a former commercial tanker

Source: adapted from John Moore (ed.) Jane's Fighting Ships, 1980-1981 (London: Jane's, 1980), 90-97; and Richard Sharpe (ed.) Jane's Fighting Ships, 1990-1991 (Surrey: Jane's, 1990), 95-105.

5. Shipbuilding and Planned Acquisitions

Chile plans to purchase three or four Moray-class diesel submarines from the Netherlands, and would like to build some of them domestically. Plans are to build the submarine force to eight strong to match Peru's force of six Type 209s and five older boats. Chile would also like to purchase additional Leander-class frigates from Britain to replace its aging ex-U.S. Allen M. Sumner-class destroyers.[135]

Other plans may include the purchase of two more Type 209 boats and four additional SAAR 4 missile boats by 1994.[136] Also under consideration is the purchase of a Vertical/Short Take-off and Landing (VSTOL) carrier.[137]

The Chilean arms producer, Cardoeir, has purchased the Italian midget submarine manufacturer, Cosmos of Livorno.[138] Midget submarines could possibly be built mainly for export, because Chile requires larger, deep-sea capable boats to protect its long shoreline.

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[135]See Joris J. Lok, "Moray, Leander Buys Considered," Jane's Defence Weekly, 06 October 1990, 622.

[136]See Navy International, December 1990, 441.

[137]Scheina(90), 113.

[138]See Scheina(91), 93.

6. Needs of the Chilean Navy

Based on the preceding analysis, Table III.C-6 subjectively ranks the degree of need the Chilean navy has for various ship types.

TABLE III.C-6
SHIP TYPES NEEDED BY CHILE TO ACHIEVE A BLUE WATER NAVY

	GEOPOLITICAL NEED (GN)				
SHIP TYPE	+2	+1	0	-1	-2
SS		X			
CV	X				
BB	X				
C,CG	X				
DD,DDG			X		
FF,FFG	X				
Coastal patrol				X	
Amphibs		X			
Support			X		

Source: author

D. CONCLUSION TO CHAPTER III

This chapter has presented the naval ship trends of the Southern Cone navies. It started with the 1980 navies, then addressed ship acquisitions through transfers and domestic shipbuilding programs, losses due to decommissioning and arrived at the navies of 1990. It compared the navies of 1980 and 1990 and then examined planned acquisitions and domestic shipbuilding for the near future. In summary, it was found that none of the three navies attained a blue-water status despite the blue-water requirements of each country's geopolitics. The types of ships that are needed

by each navy was derived from this analysis by taking into consideration only the difference between the type of navy required by geopolitical doctrine and the type of navy currently deployed. The numerical values, or geopolitical need, assigned to individual rankings are used at the end of Part One to help determine the types of decommissioned U.S. ships that are most likely to be desired by each navy.

IV. WHY SOUTHERN CONE NAVIES ARE INCONSISTENT WITH GEOPOLITICAL INTERESTS

This chapter briefly examines the main reasons why Southern Cone navies are not consistent with their geopolitical and strategic maritime interests.

A. ECONOMICS

The Southern Cone nations face enormous economic and financial constraints. They are heavily indebted to foreign creditors.[139] Throughout the 1980s, Argentina and Brazil suffered from rampant inflation and little or negative economic growth, although there are recent signs that the worst is past.[140] Today, Brazil's military officer corps typically has to work an additional job to make ends meet.[141] As recently as 1985, the Brazilian Naval Minister

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[139]Southern Cone foreign debt at the end of 1990: Argentina, $60.5 billion; Brazil, $121.0 billion; and Chile, $16.8 billion. Latin American Weekly Report, 29 August 1991, 6.

[140]The 1990 accumulated total inflation rate for Brazil was 1,287.0%; for Argentina, 2,314.0%; and Chile, 26.1%. InterAmerican Development Bank, quoted in Nathaniel C. Nash, "A New Discipline in Economics Brings Change to Latin America," The New York Times, 13 November 1991, A1. See also William R. Long, "Brazil, Argentina Grapple With Inflation," The Los Angeles Times, 02 February 1991, D1. Also, see Julia Michaels, "Brazil, Argentina Fight Inflation," The Christian Science Monitor, 06 February 1991, 7.

[141]A Brazilian army general makes about one-third the salary of a Brazilian Congressman. See James Brooke, "'Free Falling Salaries Anger Brazil's Military," The New York Times, 06 December 1990, A4.

described a plan to increase fleet size by 100 percent by the year 2005.[142] Naval budgets since then have allowed very few fleet additions. Chile, atypical in Latin America, has a relatively healthy economy. General Pinochet and his successor, President Patricio Aylwin, have successfully steered Chile away from the serious economic pitfalls experienced by other nations in the region.[143]

Military expenditures have remained steady or decreased during the 1980s.[144] Table IV.A-1 shows military expenditures for each country in constant (1988) price figures.

Table IV.A-1 shows that Chile's military expenditures rose slightly at the beginning of the decade, then leveled out while Argentina and Brazil's declined. Another key point is that, although Chile's economy may be healthier than Argentina and Brazil's, it is a much smaller economy.

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[142]Almirate-de-Esquadra Alfredo Karam quoted in Jane's Defence Weekly, 29 June 1985, 1277.

[143]See Mark Svolos, "Chile Stays On Track," The Times of the Americas, 28 November 1990, 13.

[144]Seven factors influence defense spending: economic conditions in the country, the role of the armed services in nonmilitary affairs, internal security needs, reactions to arms purchase by neighbors, budget allocations of service branches in rival sates, internal political support, and the age and condition of existing military equipment. See Peter C. Frederiksen and Robert E. Looney, "Arms Races In the Third World: Argentina and Brazil," Armed Forces & Society, Winter 1989, 265. For a general discussion on the relationship between the arms trade and economic crisis, see Michael Brzoska and Thomas Ohlson, Arms Transfers to the Third World, 1971-85 (Oxford: Oxford University, 1987), 131-132.

TABLE IV.A-1
SOUTHERN CONE MILITARY EXPENDITURES, 1980-1989

Note: Figures are in US $m, at constant 1988 prices and exchange rates

YEAR	ARGENTINA	BRAZIL	CHILE
1980	5,414	4,609	1,276
1981	5,711	3,362	1,394
1982	4,927	4,532	1,574
1983	3,897	3,276	1,313
1984	4,056	3,703	1,597
1985	3,087	3,857	1,307
1986	3,194	4,428	1,451
1987	2,966	3,908	1,299
1988	3,225	3,899	1,572
1989	3,000	3,691	1,568

Source: SIPRI Yearbook (New York: Oxford University, 1990), 195.

This explains why, even though it has enjoyed economic success, it cannot afford to purchase expensive naval platforms like aircraft carriers and cruisers.

Table IV.A-2 shows military expenditure as a percentage of gross domestic product (GDP). These figures illustrate that ABC military spending was steady (Brazil and Chile) or declined (Argentina) during the 1980s.[145]

In sum, the economies of the Southern Cone have not supported building the blue water navies demanded by their geopolitics.

[145]There has been debate among economists as to whether military spending may actually be growth-inducing. Arms transfer economist Saadet Deger concludes that "the effects of an increased military burden are growth-depressing" with respect to savings, investment, and human capital. See Deger, Military Expenditure in Third World Countries: The Economic Effects (London: Routledge & Kegan Paul, 1986), 245 (emphasis added).

TABLE IV.A-2
SOUTHERN CONE MILITARY EXPENDITURE AS A PERCENT OF GDP

YEAR	ARGENTINA	BRAZIL	CHILE
1980	6.4	1.3	6.7
1981	7.1	1.3	7.4
1982	6.0	1.6	9.5
1983	4.6	1.2	8.0
1984	4.5	1.2	9.6
1985	3.5	1.1	7.6
1986	3.7	1.2	8.0
1987	3.4	1.1	6.8
1988	3.0	1.1	7.8

Source: Saadet Deger and Somnath Sen, Military Expenditure: The Political Economy of International Security (Oxford: Oxford University, 1990), 170.

B. WORLD POLITICS

International actors have imposed numerous obstacles for developing the ABC navies. Chile faced an arms embargo by the United States and Britain from 1976 until 1990. This forced Chile to become less dependent on these countries for naval warships, but reduced the number of suppliers of quality second-hand units. President Bush lifted the embargo in December 1990, and this may allow for future U.S.-to-Chile ship transfers.

Another factor contributing to the inability of ABC navies to achieve blue-water status has been the hesitancy of free world military powers, especially the United States, to transfer advanced naval technology to Third World states. The United States seems only willing to sell platforms that

are obsolete. Argentina has continued to be hurt by Britain's logistics embargo since the 1982 Malvinas war. Until recently, this made it nearly impossible for Argentina to acquire spare parts for its British-made naval equipment. In other words, the ABC countries have not been able to rely on foreign suppliers to make available technologically-current warships in the cruiser and aircraft carrier classes.

C. WORLD ORDER

The changing international system also affects the Southern Cone navies. The U.S.-supported ABC navies were largely oriented towards fulfilling a cold war role of protecting coastal SLOCs in the South Atlantic. It seems apparent that part of the reason that blue water navies were not aggressively pursued was because it was felt the United States would protect blue water SLOCS and hence their biggest worry was a Soviet presence inside their EEZ. As discussed previously, a major motivating factor for the ABC countries has been to protect their territorial and economic zone waters from eastern bloc civilian trawlers and potentially the Soviet Navy in a wartime scenario.

With the fall of the Soviet empire and with it a diminished Soviet maritime threat, the Southern Cone now lacks a extra-regional threat on which navies can base defense spending. Although their geopolitical interests

mandate blue-water capabilities, there currently is a lack of a major threat to their blue-water interests. For differing reasons, Southern Cone navies have not been able to justify extra-hemispheric-based blue-water force plans either during or after the Cold War.

D. NATIONAL STRATEGIES NOT CONSISTENT WITH STATED GEOPOLITICAL THEMES

Despite the proliferation of geopolitical thinking in the Southern Cone, it is likely that the elites of these countries have been more concerned with internal, as opposed to external threats. Each of the ABC countries has a history of internal subversion, and political leaders are aware that this type of threat is every bit as dangerous as an external military threat. During the last several decades, the perception of the communist menace and internal subversion had caused each of the ABC countries to resort to military rule and harsh domestic human rights violations. In other words, historically, the internal threat has been more imminent than the external threat. In the case of Brazil, a Brazilian naval officer goes as far as to claim that

> the Navy's capacity to project power was actually developed to counter an internal enemy, on both the country's sea coast and in the large river basins. This dovetails with the military policies which were developed in previous decades and encouraged and supported by the

United States. Priority was given in armed forces to assure internal security against Communist guerrillas.[146]

Unless there is a major regional conflict in the near future, given the economic capacity of these countries, it is hard to imagine a concerted push to develop working blue water navies. It is not that these countries have necessarily disregarded maritime geopolitical thinking in general, but rather that they place a higher priority on regional continental threats. This is evidenced by the greater priority these countries generally place on their armies and air forces than on their navies.

In sum, this chapter has outlined some of the reasons why Southern Cone navies have not been developed to the degree demanded by stated maritime interests. It has identified the lack of an external maritime threat as the overriding factor that has prevented these countries from pursuing and attaining desired force levels. It also addressed the possibility that, given their past preoccupation with internal threats, they have not yet broken from historical thought patterns that relegate naval matters to secondary importance, behind continental security. Budgetary constraints have also served to obstruct blue-water naval plans.

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[146]Ferreira, 38.

V. RANKING U.S. WARSHIPS FOR POTENTIAL TRANSFER TO THE SOUTHERN CONE

This chapter is divided into two sections. The first section looks at ships the United States plans to decommission over the next several years. The second section develops a weighted-factor analysis for each type of ship to be decommissioned to arrive at a desirability-ranking for each ABC country.

A. UNITED STATES NAVAL SHIP DECOMMISSIONINGS[147]

The U.S. Navy plans to decommission 97 ships in fiscal 1992 and 1993. With Ticonderoga-class Aegis cruisers and Arleigh Burke-class destroyers being added to the fleet, the navy plans to decommission the entire Coontz- and Adams-class guided missile destroyers. Budget considerations prevent keeping the Iowa-class battleships on active duty, despite the lengthy and costly modernization program each had to go through before being brought back into the fleet during the 1980s.

The number of carrier battlegroups is being reduced. This has allowed three older aircraft carriers to be removed from active duty.

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[147]This section largely derived from David S. Steigman, "Ships, Aircraft Get the Knife," Navy Times, 18 February 1991, 6.

Most Knox-class frigates are scheduled to be transferred to the Naval Reserve. At least six of these vessels have been designated for transfer.[148] Greece has been designated to receive three and Thailand has expressed an interest in acquiring one or more.[149] A larger number of these ships could be made available depending on foreign demand and long-range NRF intentions. This paper assumes that there will be several Knox-class available for possible future transfer to the Southern Cone.[150]

Table V.A-1 shows the classes and numbers of ships that are scheduled for decommissioning during fiscal 1992.

B. RANKING U.S. SHIPS IN ORDER OF PREFERENCE FOR EACH SOUTHERN CONE COUNTRY

This section is divided into two parts. The first part briefly discusses factors that determine the type of ships desired by the ABC countries (not including geopolitics). The second part employs these factors in matrices to determine rankings of U.S. ships. For purposes of this paper, all but one of the factors are weighed equally. One factor, economics, is weighed three times as heavily as the

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[148]Interview with Mr. Bill Wither, Head OP-615, Washington, D.C., 28 September 1991.

[149]See Robert Karniol, "Thai Navy Seeks Knox Frigates," Jane's Defence Weekly, 19 October 1991, 705.

[150]For an overview of the world market and demand for older naval vessels, see "The Second-Hand Warship Market," Navy International, October 1988, 478-486.

TABLE V.A-1
UNITED STATES WARSHIP DECOMMISSIONINGS, FISCAL 1992

SHIP TYPE	NO.	CLASS or SHIP	COMMISSIONING YEAR
CV	(1)	Midway	1945
	(1)	Ranger	1957
	(1)	Saratoga	1956
BB	(1)	Missouri	1944
	(1)	Wisconsin	1944
DDG	(23)	Coontz and Adams	early 1960s
FF	(26)	Knox[a]	1970s
LPH	(7)	Iwo Jima	1960s
LPD	(2)	Raleigh	1960s
various auxiliaries			

[a]40/46 total units designated for reserves

Source: adapted from David S. Steigman, "Ships, Aircraft Get the Knife," Navy Times, 18 February 1991, 6.

others. Assigning subjective values from +2 to -2 for each factor, and then applying a weighing factor of three to the economics determinant, a ranking of ship types will result. The final step is to add in the geopolitical factor determined earlier, and with a weighing factor of two. The final result will be a desirability ranking of ship type for each Southern Cone country.

1. Ranking Factors[151]

a. Economic Cost

Both initial and long term costs are considered. The initial cost is comprised of down payments and purchase price. Long term costs include manning requirements, fuel efficiency, and maintenance (a function of platform age). An average of the long term costs is then averaged with the initial cost to arrive at the overall economic cost. In general, this factor will be the same for each country.

b. Prestige

If technological level of transfer is above that normally transferred by supplier, the recipient will receive a degree of prestige. In the case of U.S. ship transfers, the fact that some of these craft have relatively advanced weapons systems may account for much prestige if sold to the Southern Cone. In general, this factor will be the same for each country.

c. Dependence on United States

This factor is broken down into supply-part dependence and training dependence. In the case of some of

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[151]Much of the background on this section is derived from Christian Catrina, Arms Transfers and Dependence (New York: Taylor & Francis, 1988), 74-75.

the older platforms, it is sometimes hard to obtain spares in the United States because the original manufactures sometimes go out of business. If transferred, this type of problem becomes even harder to solve. Some (if not all) of the manufactures of ship components may only operate in the United States, implying the necessity of constructing a logistical supply path between the United States-based manufacturer and the recipient.

Training dependence is short-term in nature. Once a nucleus of recipients is trained on the various systems, they, in turn, can train the next generation. In general, this factor will be the same for each country.

d. Implied Commitment to the United States

Latin American countries have long attempted to break away from U.S. influence over their affairs. Entering into an arms transfer deal with the U.S. may imply future compliance with U.S. policy interests in the Latin American region or in United Nations General Assembly votes.[152] Although Brazil, since the 1960s, has striven for military and political independence from the U.S., it has recently expressed an interest in obtaining U.S. ships. President

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[152]The political, training, and logistics complications that develop once an arms transfer agreement has been reached are referred to as "back-end" problems. See Geoffrey Kemp, "Arms Transfers and the 'Back-End' Problem in Developing Countries," in Stephanie G. Neuman and Robert E. Harkavy (eds.) Arms Transfers in the Modern World (New York: Praeger, 1979), 264-275.

Menem of Argentina hopes to reinforce his personal political power by joining the U.S. as a player in foreign affairs. Chile has indicated it hopes to reestablish closer military and economic ties as evidenced by recent free trade negotiations and requests for military equipment. In short, the ABC countries do not seem to be overly concerned with the possible commitment implications of closer military ties.

e. Leverage

Leverage is a function of supply and demand. If the United States is actively searching for recipients to purchase these decommissioned ships, then potential buyers have a little extra leverage over the deal. If, however, the Southern Cone countries want these ships more than the U.S. needs to sell them, the leverage lies with the supplier. In general, this factor will be the same for each country.

f. Transfer of Technology

The U.S. ships that are scheduled for decommissioning contain technologies not necessarily already possessed by the ABC countries. These matrices assume that all ship systems would be included as part of an arms deal. In general, this factor will be the same for each country.

g. Expansion of Trade

Ship sales to the Southern Cone could be a step towards the establishment of a free trade area in the region, as described in President Bush's Enterprise for the Americas Initiative. In general, Chile is more willing and able to join in on a hemispheric free trade pact than Argentina or Brazil. Argentina and Brazil are concentrating more on establishing a regional trading bloc amongst themselves first (MERCOSUR). Ship leases would have a much less significant impact on trade.

h. "Keeps Military Happy"

Southern Cone elites will keep this factor in mind, considering the recent periods of military rule each of these countries has experienced. Argentina, in December 1990, experienced a coup attempt. Every armed force wants a defined mission and equipment to work with. Dissatisfied or restless military commanders are less likely to stay in the barracks.

i. Impact on Recipient's Shipbuilding Industry

Purchase of foreign warships may stifle budding domestic shipbuilding industries. In general, Brazil will be hurt more by obtaining foreign ships because it has the most significant domestic arms industry. The domestic shipbuilders in Brazil have more to lose. Argentine and

Chilean industry does not depend nearly as much on domestic shipbuilding and would not be hurt to the same degree as Brazil.

j. Possibility that Transfer Could Fuel a Regional Arms Race

A recent study concluded that military spending in Argentina and Brazil was linked to the arms race between them.[153] It is conceivable that should one ABC state receive a number of U.S. warships, the other countries may feel the necessity to make similar purchases. In general, Argentina and Brazil will compete in an arms race, although recent warming of relations indicate that this may be less of a concern. Except for Antarctic concerns, Chile, being a Pacific rather than an Atlantic power, does not care as much what ships Brazil obtains. Due to Chile's mistrust of Argentina, it may be concerned about Argentine acquisitions.

2. Ship Rankings

The next seven pages contain one table apiece (Table V.B-1 to Table V.B-7) corresponding to each of the seven ship types to be decommissioned by the United States Navy (for purposes of this thesis, the auxiliary is assumed to be a fleet replenishment oiler). Each matrix displays recipient factors (RF) for which subjective numerical values

[153]Frederiksen and Looney, 269.

are assigned. The weighted sum of RFs determines Recipient Need (RN). The RN weighed with the GN computed in chapter three determines a ship's recipient desirability (RD). Table V.B-8 ranks ship types for each country according to its RD. The numerical values assigned are strictly subjective, based on the author's own naval background, arms transfers research, and knowledge of the ABC countries. Other analysts may arrive at different values. Most importantly, this method of analysis can be used by decision-makers for ship transfers to any country.

TABLE V.B-1
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

AIRCRAFT CARRIER (CV)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	-2	-2	-2
Long Term Cost			
fuel	-2	-2	-2
manning	-2	-2	-2
maintenance	-2	-2	-2
average	-2	-2	-2
Average	-2	-2	-2
Average X 3	-6	-6	-6
2. PRESTIGE	+2	+2	+2
3. DEPENDENCE ON US			
Supply Parts	-1	-1	-1
Training	0	0	0
Average	-0.5	-0.5	-0.5
4. COMMITMENT	-1	-1	0
5. LEVERAGE	-1	-1	-1
6. TECH TRANSFER	+2	+2	+2
7. EXPAND TRADE	+1	+1	+2
8. MILITARY HAPPY	+2	+2	+2
9. ARMS INDUSTRY	0	-1	0
10. ARMS RACE	-1	-1	-1
RN:	-2.5	-3.5	-0.5
GN	+2.0	+2.0	+2.0
RD =	+1.5	+0.5	+3.5

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) + (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-2
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

BATTLESHIP (BB)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	-2	-2	-2
Long Term Cost			
fuel	-2	-2	-2
manning	-2	-2	-2
maintenance	-2	-2	-2
average	-2	-2	-2
Average	-2	-2	-2
Average X 3	-6	-6	-6
2. PRESTIGE	+2	+2	+2
3. DEPENDENCE ON US			
Supply Parts	-2	-2	-2
Training	-1	-1	-1
Average	-1.5	-1.5	-1.5
4. COMMITMENT	-1	-1	0
5. LEVERAGE	0	0	0
6. TECH TRANSFER	+2	+2	+2
7. EXPAND TRADE	+1	+1	+2
8. KEEP NAVY HAPPY	+2	+2	+2
9. ARMS INDUSTRY	0	-1	0
10. ARMS RACE	-1	-1	-1
RN:	-2.5	-3.5	-0.5
GN	+2.0	+2.0	+2.0
RD =	+1.5	+.0.5	+3.5

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) + (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-3
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

AMPHIBIOUS ASSAULT SHIP (LPH)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	-2	-2	-2
Long Term Cost			
fuel	-2	-2	-2
manning	-2	-2	-2
maintenance	-2	-2	-2
average	-2	-2	-2
Average	-2	-2	-2
Average X 3	-6	-6	-6
2. PRESTIGE	+2	+2	+2
3. DEPENDENCE ON US			
Supply Parts	-2	-2	-2
Training	-1	-1	-1
Average	-1.5	-1.5	-1.5
4. COMMITMENT	-1	-1	0
5. LEVERAGE	0	0	0
6. TECH TRANSFER	0	0	0
7. EXPAND TRADE	+1	+1	+2
8. KEEP NAVY HAPPY	+1	+1	+1
9. DOMES. ARMS IND.	0	-1	0
10.ARMS RACE	0	0	0
RN:	-4.5	-5.5	-2.5
GN	+1.0	+1.0	+1.0
RD =	-2.5	-3.5	-0.5

RF = recipient factor
RN = recipient need
GN = geopolitical factor (determined in chapter three)
RD = recipient desirability
= [(RN) + (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-4
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

AMPHIBIOUS TRANSPORT DOCK (LPD)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	0	0	0
Long Term Cost			
fuel	-2	-2	-2
manning	0	0	0
maintenance	-2	-2	-2
average	-1.3	-1.3	-1.3
Average	-0.6	-0.6	-0.6
Average X 3	-1.8	-1.8	-1.8
2. PRESTIGE	+1	+1	+1
3. DEPENDENCE ON US			
Supply Parts	-2	-2	-2
Training	-1	-1	-1
Average	-1.5	-1.5	-1.5
4. COMMITMENT	0	0	0
5. LEVERAGE	0	0	0
6. TECH TRANSFER	0	0	0
7. EXPAND TRADE	+1	+1	+2
8. KEEP NAVY HAPPY	+1	+1	+1
9. DOMES. ARMS IND.	0	-1	0
10. ARMS RACE	0	0	0
RN:	-0.3	-1.3	+0.7
GN	+1.0	+1.0	+1.0
RD =	+1.7	+0.7	+2.7

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) + (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-5
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

FRIGATE (FF)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	+1	+1	+1
Long Term Cost			
fuel	-1	-1	-1
manning	+2	+2	+2
maintenance	0	0	0
average	-1.5	-1.5	-1.5
Average	-0.3	-0.3	-0.3
Average X 3	-0.9	-0.9	-0.9
2. PRESTIGE	+1	+1	+1
3. DEPENDENCE ON US			
Supply Parts	0	0	0
Training	0	0	0
Average	0	0	0
4. COMMITMENT	0	0	0
5. LEVERAGE	0	0	0
6. TECH TRANSFER	+2	+2	+2
7. EXPAND TRADE	+1	+1	+1
8. KEEP NAVY HAPPY	+2	+2	+2
9. DOMES. ARMS IND.	0	-2	-1
10. ARMS RACE	-1	-1	0
RN:	+4.1	+2.1	+4.1
GN	0.0	-1.0	+2.0
RD =	+4.1	+0.1	+8.1

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) + (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-6
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

GUIDED MISSILE DESTROYER (DDG)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	+1	+1	+1
Long Term Cost			
fuel	-2	-2	-2
manning	0	0	0
maintenance	-2	-2	-2
average	-1.3	-1.3	-1.3
Average	-0.2	-0.2	-0.2
Average X 3	-0.6	-0.6	-0.6
2. PRESTIGE	+2	+2	+2
3. DEPENDENCE ON US			
Supply Parts	-2	-2	-2
Training	-1	-1	-1
Average	-1.5	-1.5	-1.5
4. COMMITMENT	-1	-1	-1
5. LEVERAGE	-1	-1	-1
6. TECH TRANSFER	+2	+2	+2
7. EXPAND TRADE	+1	+1	+2
8. KEEP NAVY HAPPY	+2	+2	+2
9. DOMES. ARMS IND.	0	-1	0
10. ARMS RACE	-1	-1	0
RN:	+1.9	+0.9	+3.9
GN	0.0	0.0	0.0
RD =	+1.9	+0.9	+3.9

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) = (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

TABLE V.B-7
U.S. TO SOUTHERN CONE SHIP TRANSFER RECIPIENT FACTORS AND RECIPIENT DESIRABILITY:

FLEET REPLENISHMENT TANKER (AO)

RF	ARGENTINA	BRAZIL	CHILE
1. ECONOMIC COST			
Initial Cost	0	0	0
Long Term Cost			
fuel	-1	-1	-1
manning	0	0	0
maintenance	-1	-1	-1
average	-0.7	-0.7	-0.7
Average	-0.4	-0.4	-0.4
Average X 3	-1.2	-1.2	-1.2
2. PRESTIGE	0	0	0
3. DEPENDENCE ON US			
Supply Parts	-1	-1	-1
Training	0	0	0
Average	-0.5	-0.5	-0.5
4. COMMITMENT	0	0	0
5. LEVERAGE	0	0	0
6. TECH TRANSFER	0	0	0
7. EXPAND TRADE	+1	+1	+2
8. KEEP NAVY HAPPY	+1	+1	+1
9. DOMES. ARMS IND.	0	-1	0
10. ARMS RACE	0	0	0
RN:	+0.3	-0.7	+1.3
GN	+2.0	+1.0	0.0
RD =	+4.3	+1.3	+1.3

RF = recipient factor
RN = recipient need
GN = geopolitical need (determined in chapter three)
RD = recipient desirability
= [(RN) = (2 X GN)]

key to recipient factors:
+2 = very positive aspect
+1 = positive aspect
0 = neither positive nor negative aspect
-1 = negative aspect
-2 = very negative aspect

Source: author

The preceding tables have shown the impact of various factors on a recipient's desire for a particular ship type. Economic factors are generally the most important consideration and they were computed as three times as important as all the other recipient factors. The remaining recipient factors were weighed evenly. The weighted RFs determined recipient need. The geopolitical need for each ship, as determined by geopolitical doctrine, was assumed to be twice as important as the recipient need.

Table V.B-8 shows how each of the ABC countries would rank the desirability of each of the ship types that the U.S. fleet plans to decommission in the near future. It indicates that both Argentina and Brazil would most desire a U.S.-built fleet replenishment oiler; this is consistent with the fact that neither of these countries has adequate blue-water fuel support capability. Chile would most desire a Knox-class frigate. This is also consistent in that Chile currently has only two frigates for a country with a very long coastline. Note also that the high ranking for DDGs and FFs for each country coincides with the fact that the U.S. will decommission more of these types of ships than any other in the next decade.

TABLE V.B-8

U.S. TO SOUTHERN CONE SHIP TRANSFERS:
OVERALL DESIRABILITY RANKINGS
(in order of decreasing desirability)

SHIP TYPE (RD in parenthesis)

	ARGENTINA	BRAZIL	CHILE
1.	AO (+4.3)	AO (+1.3)	FF (+8.1)
2.	FF (+4.1)	DDG(+0.9)	DDG(+3.9)
3.	DDG(+1.9)	LPD(+0.7)	CV (+3.5)
4.	LPD(+1.7)	BB (+0.5)	BB (+3.5)
5.	CV (+1.5)	CV (+0.5)	LPD(+2.7)
6.	BB (+1.5)	FF (+0.1)	AO (+1.3)
7.	LPH(-2.5)	LPH(-3.5)	LPH(-0.5)

RD = recipient desirability
= [(RN) + (2 X GN)]

Source: author

C. CONCLUSION TO PART ONE

Part one has shown that each of the Southern Cone countries--Argentina, Brazil, and Chile--has geopolitical maritime interests that require a blue water naval capability. Each of the ABC navies should have a relatively strong desire for guided-missile destroyers and frigates. Although two of the countries (Argentina and Brazil) have a significant need for a replenishment oiler, the transfer of this type of support ship does not carry with it the same ramifications that the transfer of a warship does. For this

reason, and because most of the future U.S. ship decommissionings are scheduled to be DDGs and FFs, the balance of this thesis will primarily address Adams- and Coontz-class guided-missile destroyers and Knox-class frigates.

It is the purpose of the remainder of this thesis to ascertain whether it is in the best interest of the United States to transfer these types of ships to the Southern Cone.

VI. U.S. SHIP TRANSFER PROCESS

The purpose of this chapter is to review the U.S. arms transfer process in general and ship transfer procedures in particular. The first section provides a brief overview of the arms transfer process. The second section examines the future feasibility of the following ship transfer methods: sale of excess U.S. vessels, sale of craft built specifically for export, coproduction, and lease.

A. ARMS TRANSFER PROCESS: AN OVERVIEW

The purpose of this section is to briefly summarize the arms transfer process in the United States. Of particular concern are the actors and agencies responsible for arms transfer policy-making and approval.

Over 4,000 naval vessels have been transferred by the United States to foreign nations since the end of World War II.[154] Arms transfers are conducted via two main paths: (1) sales and (2) security assistance.

1. Sales

Arms transfers are governed by the 1976 Arms Export Control Act (AECA). Arms are sold either commercially or

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[154]Subcommittee on General Procurement, Senate Armed Services Committee, Naval Ship Transfers (Washington, D.C.: U.S. Government Printing Office, 1980), 2.

through the Foreign Military Sales (FMS) process. Both tracks follow similar U.S. government approval paths. FMS contracts are overseen by the U.S. government whereas commercial contracts only come to the government's attention when the arms company applies for an export license. Most foreign customers prefer FMS largely because the Department of Defense acts as the purchasing agent and negotiates with the American manufacturer on their behalf.[155]

There are certain categories of arms sales that, under the AECA, the President may designate as FMS-only transfers. The four key criteria that determine if a FMS-only sale will be designated are: (1) legislative or Presidential restrictions; (2) DOD or Service policies, directives, or regulatory requirements, such as National Disclosure Policies; (3) government-to-government agreement requirements; and (4) interoperability or safety requirements for U.S. forces. This last criteria has been applied to ship transfers to the Southern Cone.[156]

When the Navy has determined that a vessel is no longer fit for further USN service, it is stricken from the Naval Vessel Register and may be sold to a foreign country. In this instance, the title passes to the recipient.

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[155]For a discussion of FMS versus commercial sales, see Paul L. Ferrari, Jeffrey W. Knopf, and Raúl L. Madrid, U.S. Arms Exports: Policies and Contractors (Washington, D.C.: Investor Responsibility Research Center, 1987), 51.

[156]See Defense Trade News, Vol 2 No 2, April 1991, 14.

Price determination for ship sales are provided by the Defense Property Disposal and Ship Sales Office in Newport, Rhode Island. The price is based on the estimated market appraisal and past history on sales of the same type ship. The base price is increased to cover the amount of spare parts on board, and the amount and condition of equipment remaining on board. The price is for the ship only and does not include towing, reactivation, overhaul, training, or other costs which often come up at the time of transfer and must be paid for by the recipient. Crew training can be provided under a separate contract.

"Hot ship" transfers, or those in which the U.S. crew essentially turns the ship over as is to the foreign crew, eliminate the costs of inactivation and storage (paid for by the U.S.), as well as that of reactivation (paid by the recipient). Hot ship transfers, thus, provide the foreign navy with ships that can be sailed away immediately, and are therefore the most desirable and cost effective method of transfer.

Finally, the contractual terms of a sale include restrictions against the recipient retransferring the title, possession of the ship or any component or associated support material furnished under the sales agreement, to any other government without the written consent of the U.S. government.

2. Security Assistance

There are two security assistance programs that pertain to ship transfers: (1) FMS credit program and (2) Military Assistance Program (MAP). FMS credits are U.S. government guaranteed loans which can include favorable interest rates and mild repayment schedules.

MAP involves grants that countries use to obtain military equipment and services. Both FMS and MAP enable foreign governments that are unable to afford the full price to finance weapon purchases. They are also used for governments that have been deemed deserving of financial assistance for other reasons.

The primary determinant as to whether the U.S. sells or leases a vessel is based on the U.S. Navy's potential requirement for it. If there is no requirement for it, and it is therefore declared a ship excess, selling it is the only transfer option. If there is some potential requirement for a vessel, though it is not needed at the time, then leasing is the only available transfer method.[157] In the case of a ship lease, the consideration is the

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[157]Interview with Joseph W. Bowab, Bureau of Politico-Military Affairs, Office of Defense Relations and Security Assistance, Department of State, 27 September 1991, Washington, D.C.

country's agreement to maintain the vessel in as good or better condition than it was on the date of transfer.[158]

3. Arms Transfer Approval

Once a formal FMS request for arms is submitted, the Bureau of Politico-Military Affairs (PM) of the State Department has primary responsibility for deciding whether to approve the request. The DOD, including the Defense Security Assistance Agency (DSAA) and the politico-military offices of both the DOD and OPNAV, also have a say in arms sales decisions. The DSAA is the primary manager of the FMS program. The other major agency in the arms transfer approval process is the Arms Control and Disarmament Agency (ACDA) which mainly ascertains the possible effect of a proposed transfer on regional stability.

Most arms transfers requests are not controversial. Usually, the primary decision-makers will agree on how to respond to a particular request. In a disputed transfer, other review agencies, such as the Central Intelligence Agency (CIA) and the Treasury and Commerce Departments may play significant roles. In the rare instance that a consensus cannot be reached, the Secretary of State may

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[158]Testimony of Rear Admiral T.A. Almstedt, Director, Security Assistance Division, OPNAV, before the House Foreign Affairs Committee in Authorize the Transfer of Nine Naval Vessels to Certain Foreign Governments, and Other Matters (Washington, D.C.: U.S. Government Printing Office, 1982), 4-5.

defer the final decision to the National Security Council (NSC). Ultimately, the President makes the final decision.

4. Congressional Responsibility

The AECA requires that arms sales valued at more than $1 million must be reported to Congress. Congress, however, can only turn down transfers that exceed $14 million. Second-hand ship sales typically exceed this amount. Congress has 30 days in which it can pass a joint resolution of disapproval.

To date, Congress has never vetoed a ship transfer request to anywhere in the world. Because the recipient anticipates approval once the President decides in favor of a transfer, subsequent Congressional rejection may damage U.S. credibility and relations with that country.[159] Congress' specific concerns regarding ships transfers have been few.[160]

B. FUTURE METHODS OF SHIP TRANSFERS TO THE SOUTHERN CONE

This section will determine the practicality of four common methods of transferring ships: (1) sale of decommissioned or excess vessels; (2) sale of craft

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[159]Brzoska and Ohlson, Arms Transfers to the Third World, 1971-85, 52.

[160]The assessment that Congress historically has had a general lack of concern toward U.S. ship transfers is based on extensive review of Congressional Hearings dating back to early 1960s.

specifically built for foreign use; (3) coproduction of U.S.-designed ships; and (4) lease of excess craft.

1. Sale of Excess Vessels

The ships of concern in this thesis, the Adams-, Coontz, and Knox-classes, have not been declared excess and so cannot be sold to foreign countries. There have been few vessels sold to the Southern Cone in the past few decades. Ships that are excess to the U.S. fleet are often not desired by these countries due to age and obsolescence. Also, purchase costs, including reactivation, are often prohibitive. Finally, while there has been ABC interest in leasing U.S. ships, there has been little enthusiasm expressed by any of the ABC countries for buying excess U.S. naval vessels. In short, there are likely to be few, if any, future warship sales to the Southern Cone.

2. Sale of Craft Built For Export

The United States does not normally construct ships for export. Other industrial countries, such as Germany, have found a niche in the world market by producing export models of ships or submarines used in their own fleet.

There are two main reasons why the U.S. is unlikely to build ships for export to the Southern Cone. First, the purchase cost of major warships prohibits these financially-strapped countries from affording them. Second, the DOD and

Navy has long shied away from programs that could either (a) possibly result in the production of platforms by U.S. shipyards that were no longer desired by the U.S. or (b) result in transfer of critical construction technology. The DOD believes that Congress is less likely to allocate funding for new platforms as long as foreign orders for other vessels are keeping U.S. shipyard workers employed. Also, especially in submarine construction, the Navy feels that it can't help but transfer critical construction technology in new export ships. Recently, the Egyptian government requested that U.S. shipyards construct German-designed diesel submarines for the Egyptian Navy. Even though such a program would have helped keep a dwindling pool of submarine workers employed, the Under Secretary of the Navy, the CNO, and the Assistant CNO for Undersea Warfare (OP-02) squelched the initiative because they believed that critical submarine fabrication technology would be compromised and due to traditional fears of endangering U.S. nuclear submarine funding.[161] In short, all factors indicated that the U.S. will not produce warships for export to the Southern Cone in the near future.

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[161]Interview with Mr. W.A. Wither, Head OP-615, International Programs Branch, Washington, D.C., 28 September 1991. See also David Silverberg, "Navy Says No to Bid by Ingalls For Subs," Defense News, 26 August 1991, 4. Secretary of Defense Dick Cheney recently ordered a DOD study of the Egyptian request. Defense News, 11 November 1991, 2.

3. Coproduction

Coproduction of naval warships occurs when the recipient ultimately receives both the ship and also related production technology. The U.S. has never participated in such a transfer with the Southern Cone involving ships, but has conducted coproduction deals with Argentina and Brazil consisting of aircraft.

Coproduction allows the Third World recipient to establish, enhance, or maintain a domestic shipbuilding industry. In order to acquire this technology, the recipient stipulates that such technology transfers accompany purchase of the ship. Technology transfer has a variety of meanings:

> The sale of blueprints and technical data for the production of complete weapon systems by another country; the sale of components, machine tools, and manufacturing know-how for the assembly of such items; the provision of training and technical assistance in the introduction of new production processes; and the sale of complete factories or production lines with all the parts and machines needed to operate them. Such transactions can also involve one-way transfers, whereby the U.S. government...provides another government...with the technology to produce a given weapon or component for its own use, or collaborative ventures, wherein the U.S. government...provides such expertise as part of an agreement for the joint production of a given item for the use of both.[162]

The costs involved in coproduction are similar to conventional sales costs because in the end, a new product is produced. As stated earlier, none of the ABC countries

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[162]Michael T. Klare, American Arms Supermarket (Austin: University of Texas Press, 1984), 163-164.

are currently able to afford new ships, whether they are built abroad or domestically with foreign technology.

4. Method of Choice: Lease

The most popular method of ship transfer to the Southern Cone in the past has been the lease option. Economically, it is the most affordable method for the Third World recipient. In a typical testimony to Congress, the CNO's Director of Security Assistance briefed Congress on some of the advantages of leasing inactive ships:

> The Foreign nation, then, is required to lease these ships and pay all the costs to renovate them and put them into operating condition, so we are getting a better ship at their expense.
>
> Then they are required under the terms of the lease to maintain it in that condition, so that is kind of a rent charge. Furthermore, the background is that these ships generally are more important or do more for us than they actually do for the foreign country.
>
> They also, incidentally, create business because they are overhauled here in our country. So in actuality, I think, we are really charging them lease money or rent.[163]

Another important factor, in light of President Bush's reconstitution strategy,[164] is that lease terms allow the

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[163]Rear Admiral T.A. Almstedt, in testimony before the House Committee on Foreign Affairs, 21 September 1982, 12.

[164]The reconstitution strategy refers to the concept of, following the current personnel and equipment drawdown, generating the forces and arms necessary to fight a new global military threat. The strategy assumes that the U.S. would have at least two years of warning before hostilities. Naval ships in mothballs could be reactivated and any ships leased to foreign navies could be recalled. See James J. Tritten, America Promises to Come Back: A New National Strategy Technical Report (Monterey: Naval Postgraduate School, 1991).

retransfer of the ship back to the U.S. in time of crisis. Although this clause has never been invoked on a transferred ship to date, it may turn out to be valuable in the future. The overall advantages of the lease method and its economic feasibility for Southern Cone countries, make it the best ship transfer method for the future. Thus, the remainder of this paper will only consider the lease option of ship transfers.

VII. ADVANTAGES OF FUTURE WARSHIP TRANSFERS TO THE SOUTHERN CONE

This chapter will analyze the political and military advantages for the United States should it choose to conduct transfers of U.S. naval warships to the countries of the Southern Cone in the future. The foreign policy-making process largely consists of weighing the advantages of a certain policy against the disadvantages of implementing that particular policy. The objective of this chapter, along with the subsequent chapter, is to examine the advantages and disadvantages of future warship transfers to the Southern Cone. This serves to construct a balance of pros and cons that policy-makers consider before executing a foreign policy.

The Joint Chiefs of Staff have reported the various rationale for arms transfer programs:

> In support of U.S. interests, the strategic objectives of the program are as follows: (1) to assist countries vital to U.S. national interests in preserving their independence and regional security, (2) to help secure access, overflight, transit and forward basing rights, (3) to promote standardization and interoperability of military forces, (4) to ensure continued access to critical raw materials, (5) to provide a vehicle for maximizing U.S. influence abroad...Secondarily, the U.S. security assistance program also contributes to U.S. domestic goals by helping to expand the industrial base, lower unit costs of equipment production, [and] maintain U.S. employment in key industries...[165]

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[165]Joint Chiefs of Staff, United States Military Posture, FY 1984, quoted in Ferrari, Knopf and Madrid, 56-57.

The U.S. Navy's Office of Plans, Policy and Operations for Western Hemisphere has specified a number of its objectives for Latin America.[166] These include:

(1) support national military strategy, including SLOC protection; (2) reverse impression of U.S. disinterest in Latin America; (3) reestablish contact with Latin American naval officers; (4) integrate the Latin American navies into the world community (e.g., contribute to U.N. military coalitions); and (5) maintain and increase U.S. access to ranges and other regional training opportunities.

This chapter will explore the objectives of both the Joint Chiefs and Navy in considering the benefits of warship transfers to the Southern Cone.

A. OVERLAP OF U.S AND SOUTHERN CONE NATIONAL SECURITY INTERESTS

An important advantage of transferring U.S. naval warships to the Southern Cone is that it is in the United States' national security interest to have well-armed, professional Southern Cone navies. This is becoming ever more critical as budget constraints cause the reach of U.S. Navy influence to recede. This is especially true in the Southern Pacific and Southern Atlantic oceans which the U.S.

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[166]Captain Patrick Roth, Head OP-613, Office of Plans, Policy and Operations for the Western Hemisphere, in a presentation at the Naval Postgraduate School, 10 September 1991.

Navy has virtually ignored due to the cold war preoccupation with a North Atlantic war-fighting scenario.

As the Western Hemisphere gradually develops into a regional economic zone, and as the diminishment of the Soviet threat makes the Northern Atlantic relatively less important to U.S. national security interests, U.S. military interests are likely to refocus closer to home. Additionally, drug interdiction demands a naval capability positioned astride the major trafficking routes off the west and east coast of South America. Regional stability requires U.S. naval interests to be refocused towards the Western Hemisphere. The dilemma is that traditional, non-Western Hemispheric naval deployment areas still require a U.S. naval presence at the same time that the U.S. naval fleet is being reduced to at least 425 ships. In other words, U.S. naval commitments have decreased negligibly concurrent with a drastic numerical fleet reduction. This implies that fleet commanders will be hard-pressed to divert scarce resources to the Western Hemisphere, despite its increasing importance.

At the same time, the navies of the Southern Cone are searching for a mission. These democratic governments have taken steps to reduce their military's traditional domestic focus in order to strengthen civilian rule.

There are four major areas where the national security interests of the United States and the Southern Cone

overlap. It is in these areas that the United States could substitute Southern Cone for U.S. naval presence.

1. Antarctica

As explained in Chapter I, the Antarctic is integral to the geopolitical interests of each of the Southern Cone countries. The land and ocean resources of the region, along with the continent's valuable scientific research contribution, makes this region of considerable importance to the United States as well.[167]

On 04 October 1991, the United States, along with the 25 other consultative countries, agreed to sign a treaty that bans mining on the Antarctic continent for at least fifty years. Support for the accord is largely due to the lasting ecological effects the Exxon Valdez oil spill disaster had on a similar environment in Alaska.[168] The treaty will not go into effect until all 26 countries ratify the agreement.

2. South Atlantic Sea Lines of Communication

Over 13 percent of the United States' imported supply of petroleum is shipped via the Persian Gulf, around the

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[167]See Ron Scherer, "Plumbing the Southern Ocean," The Christian Science Monitor, 14 August 1991, 10-11.

[168]Ron Scherer, "Support Grows to Protect Antarctic," The Christian Science Monitor, 17 April 1991, 6.

Cape of Good Hope, and through the South Atlantic into seaports in the Gulf of Mexico and the East Coast.[169] The Department of Energy (DOE) predicts that U.S. reliance on foreign petroleum will rise from 42 percent of consumption in 1989 to 62 percent in the year 2000, and 70 percent in 2010.[170] A reliable supply of oil is critical to U.S. economic interests and this implies control of the South Atlantic SLOCs.

Similarly, Argentina, Brazil, and to a lesser extent, Chile, rely on this same SLOC for a majority of their imported oil. These countries were especially hard hit with the increase in oil prices following the Iraqi invasion of Kuwait. Therefore, the Southern Cone countries depend on Persian Gulf oil to a significant degree to sustain their domestic oil appetite and economic growth.

3. South Atlantic and South Pacific Resource Zones

The ocean waters off the west and east coasts of South America are extremely rich fishing grounds and contain deposits of oil. Although the coastal waters are off-limits to U.S.-based fishing fleets, the deeper waters farther offshore are equally abundantly stocked. The wealth of

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[169]Matthew L. Wald, "Gulf Victory: An Energy Defeat?," The New York Times, 18 June 1991, C1.

[170]John Dillin, "Emerging Plans Aim to Cut US Oil Imports," The Christian Science Monitor, 07 February 1991, 1.

undersea food resources located in these waters is no secret to the fishing fleets of the rest of the world. Soviet and other eastern European fishing ships regularly ply these areas. A relatively recent onslaught of Japanese and Taiwanese boats, often employing ocean-raping drift nets, are a common sight in the South Atlantic and South Pacific. If world-wide food supplies tighten due to poor regional harvests and a burgeoning world population, the protection of these food resources will become more critical to the South American countries. The U.S. has recently attempted to effect a world-wide ban on the use of drift nets, but their use is still widespread by Taiwan and South Korea.[171]

In sum, it is in the national security interests of the Southern Cone countries as well as the United States to protect the valuable marine food supply of the South Atlantic and South Pacific.

4. Drug Interdiction

One of President Bush's stated national security objectives for the 1990s is to reduce the flow of illegal drugs into the United States by combatting international

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[171]Japan recently agreed to ban drift-net practices by the end of 1992. Taiwan and Korea are the next largest drift-net users behind Japan. Scott Sonner, "Japan Agrees to Ban Drift-Net Fishing," Monterey Herald (Associated Press), 26 November 1991, 2C.

traffickers.[172] Since 1985, the U.S. drug interdiction effort in Latin America has involved the use of military forces. Whether it is Special Forces advisors in Bolivia, P-3 aerial reconnaissance off the Pacific coast of Colombia, or naval warships patrolling the Caribbean and the Gulf of Mexico, the U.S. armed forces have been assigned a role in the war on drugs.[173] The drug interdiction assignment could turn out to be a salvation in light of the decline of the traditional Soviet threat and concomitant defense cutbacks.[174] The 1988 National Defense Authorization Act (NDAA) ordered the DOD to serve as the lead agency for the detection and monitoring of aerial and maritime transit of illegal drugs into the United States. In FY 1988, funding allowed the Navy and Marines to provide 2,037 ship days in support of Law Enforcement Detachment (LEDETS) at a cost of $24 million.[175]

[172]National Security Strategy of the United States (Washington, D.C.: U.S. Government Printing Office, August 1991), 3.

[173]See James Painter, "US-Trained Bolivians Gear Up for Drug War," Christian Science Monitor, 25 June 1991, 4; Ronald J. Ostrow, "Mexico OKs U.S. Overflights to Detect Drug Smugglers," Los Angeles Times, 26 January 1991, A22.

[174]See Donald J. Mabry, "The Role of the U.S. Military in the War on Drugs," in Mabry (ed.) The Latin American Narcotics Trade and U.S. National Security (New York: Greenwood Press, 1989), 76.

[175]In FY 1987, the Navy provided about 2,500 ship days resulting in 20 vessel seizures, 110 arrests, and confiscation of 225,000 pounds of marijuana and 550 pounds of cocaine, at a total cost of $540 million. Bruce Bagley, "The Myth of Militarization: An Evaluation of the Role of the Military in the War on Drugs in the Americas," in Robert J. Kurtz (ed.) Proceedings of the Latin America Strategy Development Workshop (Washington, D.C.: National

The militaries of the Southern Cone are faced with similar dilemmas of mission definition. Drug use and trafficking now occurs regularly in each of the ABC nations and is beginning to constitute a significant security threat to the region.[176] Drug interdiction, however, is not currently a stated mission of any of the ABC militaries. Further, the Southern Cone militaries have hesitated to become involved in the drug war effort. The possibility exists that due to a lack of a credible mission and the effect this has on military budgets, the ABC armed forces may follow the U.S. military's lead and adopt drug interdiction as one of its primary future purposes.

Ties between U.S. and Southern Cone drug efforts in drug interdiction are now being established. The United States Drug Enforcement Administration (DEA) is currently increasing its cooperation with the Brazilian government and is spending more money in that country.[177]

The dilemma in employing Southern Cone naval units in the drug war is that the effectiveness of the military

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Defense University, 1990), 92.

[176]See, for example, Eric Ehrmann, "Drug Barons Target Argentina," Journal of Commerce, 22 September 1989; James Brooke, "A Brazilian Border State Becomes Cocaine Route," New York Times, 20 August 1991, A4; Loreto Beiger, "Dealers Set Up Shop in Chile," Times of the Americas, 02 October 1991, 5; and Rodolfo A. Windhausen, "Southern Cone: More Than Just a Transit Point," Times of the Americas, 20 February 1991, 10.

[177]See Julia Michaels, "Brazil's Drug War Extends To Its Congress," Christian Science Monitor, 10 September 1991, 5.

effort to interrupt the flow of drugs is questionable at best. According to recent studies published by the Inter-American Commission on Drug Policy and the Government Accounting Office (GAO), the U.S. military effort has not been totally effective.[178] DOD officials, on the other hand, contend that the military's efforts have met with a considerable degree of success.[179] The potential usefulness of assigning Southern Cone navies a drug interdiction mission, then, is equally controversial. If, despite the debatable usefulness of employing the military to combat drug trafficking, the U.S. government chooses to continue to commit its naval resources toward the drug war, then it would be cost effective to encourage the support of the Southern Cone navies in this effort. The transfer of U.S. naval warships would serve to enhance the effectiveness of these navies to perform this task. It is likely that drug-exporting countries would prefer to have Latin American navies patrolling their waters than U.S. warships.[180]

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[178]See John Dillin, "US Wasting Funds in Drug Effort," Christian Science Monitor, 12 June 1991, 8; and William Matthews, "GAO, DOD Conflict on Drug War Assessment," Navy Times, 04 November 1991, 24. See also Lee Hamilton, "Effort to Attack Drugs at Source Falters, " Christian Science Monitor, 17 July 1991, 19.

[179]Matthews, 24.

[180]In December 1989 Colombia protested against the possibility that U.S. naval vessels were to be positioned off its coast to search for drug-running ships.

One potential drawback to enlisting the aid of these navies in the drug war is the possibility of military corruption. Bribery has often accompanied military drug war involvement in other countries. Some believe that this could lead to a corrupted political process resulting in a new round of military regimes.[181]

In short, the effectiveness of bringing the Southern Cone navies into the drug war is debatable at best, and it could possibly result in a corruption of the military and the entire political establishment. If, however, the U.S. remains committed to the military option, then it might be an advantage to have the ABC navies contribute to the effort.

B. HEMISPHERIC SECURITY BURDEN-SHARING

The overlap of American and Southern Cone security interests described above indicates the feasibility of proposing a mutual security pact. An agreement of this type could possibly include the transfer of regional maritime security responsibilities from the U.S. Navy to the navies of the ABC countries. One of the major justifications for U.S. naval arms transfers to these countries during the Cold War was to relieve the area obligations of the U.S. fleet so

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[181]James Malloy, Professor of Political Science at the University of Pittsburgh Center for International Studies, in Kurtz, 110.

that it could concentrate on the North Atlantic. With the Soviet threat diminished, combined with a significant draw-down of U.S. naval forces, it remains critical that the Southern Cone navies continue to be able to project maritime power for the protection of mutual national security interests. One of the President's stated national security objectives is to establish a more balanced partnership with allies and a greater sharing of responsibilities.[182] The 1991 U.S. National Security Strategy states:

> our strategy is increasingly dependent on the support of regional friends and allies. In fact--during crises--the cooperation and support of those local states most directly threatened will be critical factors in determining our own course of action.[183]

In this light, the transfer of relatively sophisticated warships can be justified. The SAM capabilities of the Adams- and Coontz-class would significantly upgrade the AAW defense capacity of these navies. The Knox-class would improve the ASW efficacy in the region. The addition of any of these ships would improve the blue-water potential and status of these maritime forces.

Another advantage to having second-hand U.S. ships employed by Southern Cone navies is related to the ability of the navy to reconstitute itself in the future. President Bush's "Reconstitution Strategy" calls for the armed forces

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[182]National Security Strategy of the United States, 3.

[183]Ibid., 28.

to be able to form a credible defense to a Soviet level threat with about two years' notice.[184] For the U.S. Navy, this could involve the reactivation of ships in the inactive reserve. One lesson learned from Desert Shield and Desert Storm was that it took much longer than expected to reactivate mothballed vessels. In this case, the ships were not activated in time to participate in the war effort. The advantage, then, of transferring these ships under lease is that under terms of the lease, the U.S. Navy can repossess the ships in time of crisis. These ships would be available for U.S. Navy use much sooner than mothballed ships. Furthermore, ships retransferred back to the U.S. may already be stocked with ammunition and supplies. This would reduce even further the time before the platform could be employed in hostilities.

Before the U.S. decides to take back leased ships, it should consider the possible negative political ramifications associated with such a move. Recipient governments may resent losing these ships. If the threat that prompts a U.S. force reconstitution is also considered a threat by the recipient, the leaser may prefer to keep the ship in order to provide maritime security for itself. Finally, problems may surface that could reduce the

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[184]Ibid., 29-30.

feasibility of retransferring these vessels to the U.S. fleet.

In sum, the transfer of U.S. warships to the Southern Cone would reenforce the ability of the ABC navies to defend common regional interests and could serve to improve the reconstitution time of the U.S. Navy.

C. ECONOMIC CONSIDERATIONS OF RECIPIENT COUNTRIES

In light of the mutual security interests between the United States and Southern Cone, and considering the economic difficulties of these countries, the transfer of U.S. warships under a no-cost lease would be the cheapest way for these navies to acquire ships of significant capability. None of these countries can afford either serious shipbuilding programs or purchase of new warships. The addition of ex-U.S. frigates and destroyers may be the only feasible way these navies can continue to upgrade their forces.[185] An example of the U.S. Navy's philosophy regarding the transfer of excess vessels that still applies today, was stated by the Chief of Naval Operations (CNO), Admiral Holloway, during Congressional hearings on proposed ship transfers to Argentina and Colombia in 1976:

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[185]Argentina, for example, is exploring the possibility of purchasing relatively inexpensive surplus military equipment (not ships) from the U.S. in order to reorganize it services over the next five to eight years. See J.C. d'Odorico, "Argentina's Modernization Plan Could Send Surplus US Equipment South," Armed Forces Journal International, September 1991, 26.

> Although these vessels are no longer capable of the extended deployments or rigorous use concomitant with service in the United States Navy, they provide a significant improvement in the naval capabilities of the foreign countries. The increased capabilities of our allies strengthen our mutual defense agreements and benefit the defense posture of the United States.[186]

Under a no-cost lease, the only expenditure involved in obtaining a ship would be the cost of refurbishing it out of mothballs. This cost, which is sometimes high enough to be prohibitive to potential recipients, can be considerably reduced by a hot transfer from the U.S. crew to the recipient crew. This means that if U.S. policy-makers decide to transfer these ships, they should attempt to control the decommissioning rates of these ship classes to coincide with the projected delivery dates to the foreign navy. In sum, it may be that the only way the navies of the Southern Cone can afford to continue to build and improve their forces is to receive no-cost leases from the United States.

D. APPEASES MILITARY IN POST-AUTHORITARIAN DEMOCRACIES

Exporting democracy and containing Communism has been a U.S. foreign policy goal throughout the Cold War. In the post Cold War era, U.S. interests are focused on preventing

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[186]Admiral J.L. Holloway, CNO, quoted in Hearings on S.3734 to Approve the Sale of Certain Naval Vessels, and For Other Purposes, before the House Subcommittee on Seapower and Strategic and Critical Materials, 16 September 1976 (Washington, D.C.: U.S. Government Printing Office, 1976), 2.

the return of military-led authoritarian regimes to the Southern Cone. The President's stated national security objectives include strengthening "the commonwealth of free nations that share a commitment to democracy and individual rights."[187]

It is clear that democracy has not been fully consolidated in any of the ABC countries. One has only to look at the prerogatives the militaries of these countries either possess or are attempting to reassert. Political scientists that have studied democratic regime-breakdown have derived lists of factors that determine the success or failure of nascent democratic governments.[188] The one cause of regime collapse of concern here is the role of the military. Latin American countries, and the Southern Cone in particular, have had a legacy of difficult civil-military relations. Often, the military in an unconsolidated democratic regime serves as the "poder moderador", the real power behind the elected government.[189] According to Alain

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[187]National Security Strategy of the United States, 3.

[188]See Larry Diamond and Juan J. Linz, "Introduction: Politics, Society, and Democracy in Latin America," in Diamond, Linz, and Seymour M. Lipset (eds.) Democracy in Developing Countries: Latin America, Volume 4 (Boulder: Lynne Rienner, 1989)[hereinafter "Diamond and Linz"]; Juan J. Linz, The Breakdown of Democratic Regimes: Crisis, Breakdown, & Reequilibration (Baltimore: Johns Hopkins University, 1987); and Guillermo O'Donnell and Phillippe C. Schmitter, Transitions from Authoritarian Rule: Tentative Conclusions about Uncertain Democracies (Baltimore: Johns Hopkins University, 1989).

[189]See Linz, 73.

Rouquié, "there is no doubt it is easier to demilitarize the government than to remove the military from power."[190]

Although the three countries studied here have made significant strides to de-praetoritize their political systems, the fact remains that each of these armed forces still claims certain military prerogatives.[191] Long-term disengagement by the military from ABC politics remains uncertain.[192] In Chile, General Pinochet remains the de jure Commander in Chief of the armed forces. In Argentina and Brazil, the military has yet to completely forsake its historical role as poder moderador.

The civil-military relationship is partly defined by the degree of military contestation.[193] The decline of the military budgets in Argentina and Brazil since the installation of civilian rule has served as point of

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[190]Alain Rouquié, The Military and the State in Latin America (Berkeley: University of California, 1989), 376.

[191]For a discussion of military prerogatives in newly democratic regimes, see Alfred Stepan, Rethinking Military Politics: Brazil and the Southern Cone (Princeton: Princeton University, 1988), Chapter 7.

[192]Claude E. Welch defines long-term military disengagement from politics as "(1) a minimum of ten years during which at least one successful 'regular' executive transition has occurred and (2) during which the level and nature of military involvement in politics have moved significantly from military 'control' to military 'participation', or from military 'participation' to military 'influence' in politics. See Welch, No Farewell to Arms?: Military Disengagement From Politics in Africa and Latin America (Boulder: Westview, 1987), 20.

[193]Stepan, 68. The other defining factor is the extent to which the military maintains various prerogatives.

considerable contestation. Recent rumblings over low pay is one piece of evidence that the armed forces are not happy about the cut in military spending.[194] Decreased budgets have caused serious degradation to mission capability in each of the ABC navies. Furthermore, the traditional anti-Soviet orientation of these navies is no longer a valid one. In short, these navies are ill-equipped and without a legitimate and focused external defense mission.[195] The result is that a military feels threatened for its very existence. It is precisely this sort of situation that often prompts the military to take over the government in order to ensure adequate resources are directed to the armed forces. According to political scientist Alfred Stepan,

> One of the indirect background reasons that makes Third World armies so eager to control the governments of their countries...is that they are acutely aware that they are almost totally dependent on the importation of foreign arms and they have no significant internal civilian constituency with a structurally vested interest in arms importation...This can become a military justification or motivation for controlling the government and the nation's budget.[196]

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[194]See Julia Preston, "Brazil's Brass Fights War of Words," Washington Post, 14 July 1991.

[195]See James Brooke, "Latin Armies Are Looking for Work," New York Times, 24 March 1991. The Brazilian Air Minister, in an effort to win public support for military pay increases, recently placed a full-page article in a large newsweekly advertising the military's civic action work rather than extolling the merits of traditional defense missions and equipment.

[196]Stepan, 84.

The transfer of relatively affordable naval warships to these nascent democracies, then, can contribute to their democratic consolidation by providing the navies with the types of arms necessary for external mission definition. In other words, if the navies are suitably equipped, the naval elite can focus on specifying appropriate externally-concentrated objectives instead of possibly conspiring with other branches of the armed forces to remove a civilian government perceived as neglectful of the military. In short, a navy without the types of ships it needs to accomplish its geopolitically-determined aims is a potential threat to democracy.

E. JOBS FOR U.S. INDUSTRY

The final advantage of transferring older U.S. warships to the Southern Cone is that, historically, similar transfers have served to maintain certain segments of U.S. industry employed in the production of spare parts and supplies. Maintaining the industrial base is a U.S. security objective.[197] The impact on the U.S. economy from this logistics support is probably less pronounced than if ships were being built for direct transfer, but it is an economic contribution nonetheless. In older ships, it sometimes occurs that original part manufacturers have gone

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[197]National Security Strategy of the United States, 30.

out of business. When a particular part fails, a new company is contracted to tool up to produce the component. If these older U.S. ships were to be mothballed instead of transferred, U.S. industry, lacking a demand for spares, will re-tool to accommodate other clients. This means that should the U.S. fleet be required to reconstitute, U.S. industry would be unprepared to provide parts support. By transferring some of these ships, then, the Navy can ensure it has suppliers for the types of parts that may be needed by the remaining mothballed vessels in a future reconstitution scenario. In some cases, the companies that had been providing parts support will suffer a drop in contracts and may not even be able to stay economically viable as the ships are placed into the inactive reserve. Either way, the U.S. economy is affected by the implications of higher unemployment. In sum, the continuity of parts contracts resulting from the transfer of these older U.S. ships to the Southern Cone is advantageous to U.S. industry.

F. SUMMARY AND CONCLUSION TO CHAPTER VII

This chapter has outlined the advantages of transferring U.S. warships to the Southern Cone. Overlapping U.S-Southern Cone maritime security interests, including the Antarctic, South Atlantic SLOCs, South Atlantic and South Pacific ocean resources, and drug interdiction, indicate

that strong ABC navies would serve U.S. security interests. As the U.S. Navy's budget and forces are cut back while world-wide deployment commitments remain nearly the same, it would be a benefit to the U.S. if the Southern Cone navies could be relied upon to handle these types of mutual security missions. This can be accomplished by continuing UNITAS-type navy-to-navy exercises and bolstering the maritime order of battle by transferring older U.S. warships. It has also been argued that the only practical way for the financially-strapped ABC navies to afford technologically advanced warships is to lease U.S. Adams-, Coontz-, and Knox-class ships. Mission capable ABC navies may even preempt notions by Southern Cone naval elite to plan military coups with disillusioned or frustrated leaders from other service branches. Promoting Southern Cone democratic political institutions that encourage the highest levels of human rights, economic and social standards, is an important element of the United States' national security policy.

Arms transfers have historically been used to strengthen the political and military ties between the supplier and recipient. The transfer of these warships would serve a similar purpose.[198] Lastly, U.S. industry would benefit by

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[198]Interview with former Assistant Secretary of State for InterAmerican Affairs, Elliot Abrahms, 09 July 1991, Monterey, California.

keeping equipment and spare parts personnel employed after the decommissioning of these ships from the U.S. fleet.

VIII. DISADVANTAGES OF TRANSFERRING NAVAL WARSHIPS TO THE SOUTHERN CONE

The purpose of this chapter is to examine those aspects of U.S. naval warship transfers to the Southern Cone that could be considered disadvantages to the U.S. government and U.S. Navy.[199]

A. ABC NAVIES COULD POSE A THREAT TO THE U.S. NAVY, U.S GEOPOLITICAL INTERESTS, OR TO U.S. ALLIES

The potential exists that ships transferred to the Southern Cone could be used in a military context against the U.S. Navy, against a navy of an U.S. ally, or against a particular geopolitical interest of the United States. A naval action of this sort, in which transferred U.S. warships are used against American interests, could occur in any of three possible scenarios.

1. Scenario #1: Friendly Government Turns Hostile

In this scenario, the government to which the ships were transferred, presumably friendly to the U.S. at the time of the transfer, could suddenly become belligerent to the U.S. to the point of open naval hostilities. In the

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[199]A summary of politico-military and economic costs of exporting arms is provided in Catrina, Arms Transfers and Dependence, 71-72. The factors discussed in this paper are those that the author believes figure most prominently in the debate over future naval ship transfers to the Southern Cone.

Southern Cone, the current state of relations between the U.S. and these newly-democratic regimes is characterized by cooperation and good will, possibly the best relations experienced in several decades. President Saúl Menem of Argentina has been the most visible in repairing once strained relations with the United States.[200]

President Fernando Collor de Mello of Brazil has been considerably more friendly toward the United States than his predecessor, President José Sarney. This is largely due to Brazil's desire to integrate into the First World by reducing its external debt and revamping its economy. Brazil desperately needs U.S. assistance to solve both of these problems, either through direct debt reduction programs or through U.S. influence with the World Bank and other global lending agencies.

Finally, U.S.-Chilean relations have improved dramatically since President Bush lifted arms sales sanctions enacted in 1976 due to human rights violations by the Pinochet regime and the assassination of Chilean Foreign Minister Orlando Letelier in Washington, D.C. The only major negative political incident between the two countries

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[200]See Barbara Crossette, "Argentine, on Visit, Reports Turnaround," The New York Times, 15 November 1991, A3. One of Menem's three foreign policy priorities upon taking office was to strengthen relations with the capitalist countries, particularly the United States, in order to integrate Argentina into the world economy and to resolve its debt crisis. See Roberto Russell and Laura Zuvanic, "Argentina: Deepening Alignment With the West," Journal of InterAmerican Studies and World Affairs, Fall 1991, 114.

was the 1989 case of imported Chilean grapes that the Food and Drug Administration (FDA) claims were laced with arsenic. This resulted in a five-day ban on Chilean grapes that caused immediate financial distress to the Chileans and a lasting political sensitivity in U.S.-Chilean relations.[201] Despite this one incident, however, President Aylwin has moved forward to improve the link between the two countries.[202] Chile is earnestly working towards integrating its relatively-advanced Latin American economy with the U.S. via free trade contracts.[203] In sum, it is in the best interests of each of the ABC countries to continue the currently warm relations with the United States. It therefore seems implausible that the current democratic regimes would undertake any kind of military action against U.S. interests, including naval hostilities using transferred American warships.

2. Scenario #2: Friendly Regime Replaced by Belligerent

The second possible scenario is the situation where the friendly government of the recipient country is

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[201]See Shirley Christian, "Chile May Sue the U.S. Over Its Ban on Grapes," The New York Times, 12 September 1990, A4.

[202]See Muñoz and Portales, 99.

[203]See Clyde H. Farnsworth, "U.S. Signs Trade Pact With Chile," The New York Times, 02 October 1990, C5 and Thomas Kamm, "Chile Seeks Closer U.S. Trade Ties," The Wall Street Journal, 08 January 1991.

succeeded by a regime distinctly unfriendly towards the United States, resulting in future open naval hostilities against American interests.

In the Southern Cone, each of the ABC countries is nurturing nascent democracies that overcame military rule (Argentina, 1983; Brazil, 1985; and Chile, 1990). In each case the military continues to hold varying degrees of prerogatives. Argentina and Brazil have achieved the greatest degree of civilian control of the military to date. Chile's General Pinochet, who remains the head of the Chilean armed forces, maintains considerable political power.

There are two main questions that should be addressed concerning military rule and future arms transfers to the Southern Cone. First, how likely is it that the military will take over? Second, if it does assume power, will the military adopt an unfriendly foreign policy posture towards the U.S.? Another important question to be answered is whether or not there exist political parties or movements that have expressed hostile anti-U.S. sentiments and that are politically viable. Is it possible the current friendly, pro-U.S. government could be succeeded democratically by an anti-U.S. regime that may possibly choose to employ naval forces against U.S. interests?

a. Stability of Argentine Government

The possibility of future military rule in the Southern Cone varies from country to country. In Argentina, President Menem has brought the military largely in line with his own policies, domestic and foreign. In particular, the Argentine Navy's strong desire to participate in Desert Shield and Desert Storm was accommodated by Menem's foreign policy initiatives designed to bring Argentina back into the forefront of global political participation. Menem also received the military's backing when rebel soldiers attempted a coup in December 1990. Lastly, Menem has seemingly been successful in scrapping the Air Force's coveted Condor II ballistic missile program. The technology development associated with this program was placed firmly under civilian control. Part of Menem's motivation in terminating the military aspects of this program is that it was considered an obstacle to better relations with the United States. President Bush has ardently opposed the missile program.[204]

There have been some hints of unrest in the Argentine military related to low pay. In a series of incidents at various military installations in September 1990, disgruntled soldiers vandalized offices and vehicles.

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[204]See "Argentine Missile Developments Placed Under Civil Control," International Defense Review, September 1991, 908.

The perpetrators were possibly connected to the carapintada mutineers who have designated the imprisoned December 1990 coup attempt leader, Colonel Mohamed Ali Seineldin, as their leader. In an attempt to defuse the situation, military pay was increased by up to twenty-five percent. Funds raised from the privatization of various defense industries are to be used to supplement future defense budgets.[205] For now, however, the boosted pay scales remain pitifully low compared to the cost of living, leading some to believe that pay-induced civil-military tensions may continue for some time.[206] In sum, although some civil-military tensions currently exist, the Argentine armed forces and the Navy in particular, appear to be supportive of current civilian rule and thus it is likely civilian rule will last for the foreseeable future.

President Menem's political status is rising largely due to the improving Argentine economy and in spite of recent corruption charges against his administration. In the 08 September 1991 gubernatorial and congressional elections, Menem's Peronist party scored impressive

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[205]Julia Michaels, "With World Bank Loan in Hand, Argentina Moves Ahead to Reorganize Its Military," The Christian Science Monitor, 03 October 1991, 5.

[206]See "Pay Award Follows Spate of Unrest," Latin American Weekly Report, 17 October 1991, 10.

victories, underlining his political strength.[207] He is seeking to capitalize on his popularity by attempting to change the Argentine constitution so that he may serve another five years as president. Even if he does not, there are not any viable opposition parties proposing drastic changes in foreign policy toward the U.S. The only known nationalist group calling for a break with the U.S. is Colonel Seineldin and his carapintada mutineers. The only realistic chance to for them to attain power would be through military coup, not via democratic elections.[208] In sum, Argentina's government is likely to remain civilian-ruled and pro-U.S. in the foreseeable future.

b. Stability of Brazilian Government

Brazilian civil-military relations are currently strained. Severe budget restraints have resulted in low morale for the Brazilian armed forces. The degraded spirit is primarily due to extremely low pay, a slashed defense budget, and a lack of a legitimate mission.[209] Discontented top brass are lobbying for a military budget of five to six percent of the national budget, instead of the current 3.7

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[207]See Marcelo Cantelmi, "Peronists Rout Opposition," Times of the Americas, 18 September 1991, 1.

[208]Ibid.

[209]See Latin American Weekly Report, 10 October 1991, 8.

percent.[210] The military leadership is having difficulty focusing on a overarching purpose for its existence, now that the traditional cold war external threat has subsided. Unfortunately, perhaps, for President Collor, the military is gradually shifting toward a perceived internal threat, a threat to Brazilian sovereignty, namely the international environmental effort to save the Amazon rainforest.[211] A renewed internal military focus conjures recent memories of military anti-subversion activity that characterized the most recent military regime from 1964 to 1985.

Although there exists military discontent with the current civilian administration's policies, there have been no clear indications that the military is prepared to assume political power beyond discussion among a handful of retired military officers.[212] There is virtually no talk of a possible military coup. Nonetheless, left and center political forces have called for an early plebiscite to determine the future of the Brazilian constitution. There appears to be growing support for the adoption of a

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[210]Latin American Weekly Report, 12 September 1991, 3.

[211]Ibid. This new focus of the Brazilian military was also related by various Brazilian military officials during a recent briefing visit to the Defense Department's politico-military specialists at the Pentagon in September 1991. See also James Brooke, "Brazil Creates Reserve for Imperiled Amazon Tribe," The New York Times, 19 November 1991, A3. This newly emerging concern is also shared, in part, by Argentina and Chile. See Latin American Weekly Report, 29 August 1991, 4.

[212]Latin American Weekly Report, 29 August 1991, 4.

parliamentary system in order to reduce Collor's presidential powers which are being blamed for the country's economic difficulties. The hope is that a parliamentary system would avert the threat of military intervention.[213] Even if the military were to take over, there is no reason to believe that it would result in such poor U.S.-Brazilian relations that military hostilities would occur. U.S. opposition to a military coup could, however, lead to a chilling of relations to the extent that the Brazilian Navy may not be able to be relied upon to conduct mutual security missions.

Collor's political future looks dim. His popularity has plummeted drastically in 1991 because of continued hyperinflation. His party controls only three percent of the seats in Congress making it difficult for him to pass legislation.[214] At this time, however, there are no known virulently anti-U.S. political parties in Brazil that could possibly rise to power in the next election.

c. Stability of Chilean Government

Chilean civil-military relations remain tense but are easing. General Pinochet continues as the commander in

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[213]See "'Understanding' Among All Others?," Latin American Weekly Report, 17 October 1991, 4.

[214]See James Brooke, "Brazil's Fresh Young President Has Grown Old Fast," The New York Times, 20 October 1991, E4.

chief of the Army and, under a 1980 constitution drafted to his specifications, he can stay on until 1997 and he cannot be fired. This constitution made the armed forces into the virtual fourth branch of government and the "guarantor of institutional order."[215] Pinochet remains popular with the Chilean right-wing and with the military. On 08 January 1991, army generals declared their "unrestricted loyalty" to Pinochet.[216] Investigations of human right abuses under Pinochet by the military have resulted in no indictments or convictions, largely because Pinochet has not allowed it. Human rights investigations continue to occur.[217] This is a potentially destabilizing issue for future civil-military relations. The 01 April 1991 slaying of Chilean Senator and Pinochet advisor Jaime Guzmán followed a March 1991 government report criticizing the military and former secret police for the deaths and disappearances of several thousand people between 1973 and 1990. The Guzmán assassination

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[215]Brian Loveman, "¿Misión Cumplida? Civil Military Relations and the Chilean Political Transition," Journal of InterAmerican Studies and World Affairs, Fall 1991, 46.

[216]William R. Long, "Chile Trying to Live With Democracy...and Pinochet," Los Angeles Times, 05 February 1991, H3.

[217]See Julia Michaels, "Chilean Activists Hail Moves on Human Rights," The Christian Science Monitor, 24 October 1991, 4; Nathaniel C. Nash, "Graves Without Name Yield Secrets," The New York Times, 19 September 1991, A4; and "Abuses Under Pinochet Still Surface," Washington Report on the Hemisphere, 16 October 1991, 1.

prompted right-wing calls for a return to military rule.[218] Many ordinary Chileans fear the military and prefer that the government drop the human rights issue.[219]

Pinochet has also been tied to several financial scandals involving his own children, the military and the Chilean Supreme Court.[220] These tribulations may have led to recent statements indicating that he is prepared to step down.[221] Should he retire, it could avert future confrontation between the army and the civilian government over human rights matters.

Indications of a reborn insurgency movement in Chile has alarmed the civilian government because of the military's demand for swift reaction.[222] The remote possibility exists that, should the terrorist movement get out of hand in the eyes of the armed forces, the military may choose to seize power in order to deal with this internal threat more efficiently. There is no indication,

[218]Nathaniel C. Nash, "A Slaying Inflames Chilean Rightists," The New York Times, 03 April 1991, A3.

[219]See Tim Frasca, "Chile Rights Report Stirs Nation," The Christian Science Monitor, 04 April 1991, 3.

[220]See Henry Goethals, "Chilean Military Stained by Scandal," Times of the Americas, 14 November 1990, 2 and Roberto J. Frisancho, "Official Probe Into 'La Cutufa'," Times of the Americas, 28 November 1990, 13.

[221]See Shirley Christian, "Pinochet Seems Willing to Yield Army Control," New York Times, 22 January 1991, A11.

[222]Nathaniel C. Nash, "Terrorism Jolts a Prospering Chile," The New York Times, 09 April 1991, C1.

however, that the terrorist situation will ever get so bad as to induce a coup.[223]

The next Chilean presidential election is scheduled for 1993. The economy is currently on the downswing from past years of explosive growth, although it is still far ahead of the Latin American average.[224] This may hurt Aylwin's Christian Democratic party's chances of winning the next presidential election. It is likely that the next Chilean president will adopt a pro-U.S. stance. Chile's right-wing political parties, Unión Demócrata Independiente (UDI) and Renovación Nacional (RN), adhere to anti-U.S. sentiments as part of their anti-imperialist postures. Neither of these parties, however, currently has a large public following.[225] In short, most Chileans have embraced democracy, reject the military as a future political power, and want better relations with the U.S.[226]

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[223]Current Chilean terrorist groups include the Manuel Rodriguez Liberation Front (FPMR) with 500-1000 members. The other main group is the Movement of the Revolutionary Left (MIR) which has about 500 members. Both groups are headquartered in Santiago and are anti-U.S. See Terrorist Group Profiles (Washington, D.C.: U.S. Government Printing Office, 1988), 94-98.

[224]Julia Michaels, "Slow Economy Worries Chileans," The Christian Science Monitor, 26 September 1991, 8.

[225]Latin American Weekly Report, 14 November 1991, 6.

[226]See Julia Michaels, "Chileans Consolidate Democratic Gains," The Christian Science Monitor, 11 September 1991, 4.

3. Scenario #3: Ships are seized by Insurgency Forces or by an Unfriendly Country

The third and last scenario is where the ex-U.S. warships, transferred to friendly countries, fall into the possession of powers unfriendly to the United States. This could occur either through the subsequent retransfer of the warships from the original recipient to a third country or by the illegal seizure of the warships from the friendly recipient by internal or external hostile forces.

Under the terms of virtually all U.S. arms transfers, recipients cannot retransfer arms without the explicit approval of the United States. A country that chooses to ignore this caveat risks undermining its relations with the U.S. and destroying its future suitability as a recipient of U.S. arms. Thus, it follows that an ABC country would not retransfer a warship to a third country without U.S. approval unless relations between that country and the U.S. had already deteriorated, a situation that would fall under the first scenario described above.

The illegal expropriation of transferred arms is not too unusual. Guerrilla movements often confiscate U.S.-made weapons as the spoils of a battle victory. An example would be the FMNL in El Salvador which has such access to U.S. arms because the U.S. supplies the El Salvadoran military with equipment. In the case of naval warships, especially frigate size and larger, as the discussion here involves, it

is hardly conceivable that a guerrilla movement would be able to steal, let alone win in battle, one of these capital ships. It is therefore an extremely minor possibility to consider when contemplating naval ship transfers to the Southern Cone.

In sum, the possibility that transferred U.S. warships would be employed against American interests seems unlikely. In all the cases described, it would be a remote possibility that any of the ABC navies under any circumstances would initiate naval aggression against the world's foremost military and naval power. The tenuous civil-military relations in each country, though not currently considered irreparable, should be taken into account during the ship transfer consideration process.

B. NAVAL ARMS RACE

Another potential disadvantage of transferring warships to one or more Southern Cone countries is the possible naval arms race it may spawn. United States national security interests include the reduction of military capabilities that could provide incentives to initiate attacks.[227] Historically, Argentina and Brazil have engaged in a military arms race, with each country vying to become the first nuclear power in Latin America. This competitive

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[227]National Security Strategy of the United States, 14.

relationship has begun to subside as evidenced by the rather congenial, cooperative political relationship between the two countries. Each has agreed to bide by a policy of nuclear non-proliferation, although neither yet has signed the Nuclear Non-Proliferation Treaty (NPT).[228] President Collor of Brazil ordered his military to cease nuclear weapon development in September 1990.[229]

With Argentina and Brazil each joining the new free trade bloc MERCOSUR, the incentive for mutual cooperation has been reinforced. It thus seems that these two countries have overcome their historically antagonistic relationship in which an arms race prevailed.

Chile still has an uneasy relationship with Argentina, spurred on most recently by Chile's tacit support of Great Britain in the Malvinas War. Chile still does not allow any Argentine observers aboard its ships during the Chilean phase of UNITAS.[230] Historically, there has not really been an arms race between Chile and Argentina. One reason is that Chile's economy, though relatively vibrant, is considerably smaller than Argentina's and hence Chile could

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[228]See Michael Wines, "Brazil Won't Sign Nuclear Pact but Plans Curbs, Official Says," The New York Times, 17 October 1991, A4. See also Shirley Christian, "Argentina and Brazil Renounce Atomic Weapons," The New York Times, 29 November 1990, A1.

[229]James Brooke, "Brazil Uncovers Plan by Military To Build Atom Bomb and Stops It," The New York Times, 09 October 1990, A1.

[230]Interview with Commander Thad Moyseowicz, OP-613, 26 September 1991, the Pentagon.

never afford to purchase large weapon systems that Argentina could. The other factor is that from 1976 to December 1990, Chile suffered from a U.S.-led arms embargo that preempted responding to Argentine arms purchases.

There is no historic precedence nor indication of an arms race potential between Chile and Brazil. The three ABC countries recently signed a declaration banning the development, manufacture and use of chemical weapons. This serves as a significant step towards overall regional demilitarization and detensioning.[231] According to Southern Cone arms and naval experts at the office of the Chief of Naval Operations and the State Department, an arms race among the Southern Cone countries is not a concern in considering the transfer of U.S. warships.[232]

C. PROBLEMS ASSOCIATED WITH LOGISTICS SUPPORT AND MAINTENANCE OF OLDER U.S. WARSHIPS

It was pointed out in the previous chapter that one advantage to the U.S. of the transfer of older ships is that it provides American industry with the opportunity to provide long-term parts support for these platforms. This

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[231]Nathaniel C. Nash, "3 Latin Nations Agree to Ban Chemical Weapons," The New York Times, 06 September 1991, A3.

[232]Based on author's interviews with Commander Thad Moyseowicz, OP-613; Commander George J. Murphy and Lieutenant Commander Robert Kirk, OP-603 ; Mr. W.A. Withers, OP-615; and State Department Desk officers John P. Caulfield (Brazil) and Mr. Ferrari (Argentina). Interviews conducted in Washington, D.C., 26-27 September 1991.

section addresses the issue of maintaining these twenty to thirty-year-old ships. In many instances, the original manufacturers of various ship equipment and machinery have long since ceased to produce those particular parts. This means that new manufacturers in the U.S. or in the recipient country must tool up and begin to produce repair and replacement parts. If a U.S. company is selected by the recipient to produce these parts, it is a long-term benefit to the American economy. More likely than not, however, the recipient country will award repair part contracts to indigenous vendors. Each of the ABC countries has a significant industrial base capable of fabricating the necessary parts. The negative aspect of repair and replacement parts for the recipient is that there will tend to be many required in such old platforms, therefore adding to the long term costs of operating and maintaining them. This burdens the already hampered ABC economies and shrinking defense budgets.

Another related problem is that the engineering plants on the Knox-, Adams-, and Coontz-class ships consist of high pressure steam propulsion plants that are extremely challenging to maintain. It is largely because of the enormous difficulties encountered by the U.S. Navy with these steam plants, combined with the fuel inefficiency of their high-pressure oil-fired boilers, that the CNO has opted to decommission them. It stands to reason that a

future Southern Cone recipient will face the same laborious maintenance difficulties. The potential disadvantage to the U.S. is that the recipient is likely to blame the U.S. for transferring the problem ship in the first place. It must be noted, however, that the Navy International Programs Office (NIPO), that coordinates the transfer of ships once the CNO has approved their transfer, very carefully indicates the negative aspects of the ship in question.[233] A detailed report of the cost of operating each potential transfer is included in the Visibility and Management of Operating and Support Costs-Ships (VAMOSC-SHIPS) Reports Catalog, prepared by the Naval Sea Systems Command. In other words, there should be no cost surprises to the recipient once it commissions the transferred ship into its inventory. In the case of the recent transfer of the four Garcia-class frigates to Brazil, there have no significant problems in this area.

The other aspect of operating warships that are three decades old warships is that, even if the recipient is fully capable of acquiring parts support, the age of these platforms predicts that they will require significant periods of repair availability time. This means that these ships will not be operationally available as much as a newer platform would be. This reduces the overall effectiveness

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[233]Interview with Commander Garmen, head of NIPO, 27 September 1991, Washington, D.C.

of the recipient's navy, thus eroding the degree to which the U.S. can rely on it.

In sum, although the long-term maintenance and operating costs to the recipient of operating and maintaining older U.S. warships is significant, the recipient is fairly warned prior to the transfer of the exact expenses it should anticipate.

D. SOUTHERN CONE ECONOMIC AND SOCIAL DILEMMAS

The health of the ABC economies has significant implications for the future of U.S. ship transfers to the Southern Cone. It is commonly acknowledged that none of these countries can afford expensive weapon system purchases. Even if warships are designated excess to the U.S. inventory and thus can be leased essentially free, the recipient must absorb all the costs of preparing the ship for transfer, which can be considerable.[234] Naval programs are capital intensive because they involve more than ship acquisitions. Shore facilities, logistics support and

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[234]The U.S. Navy designates ships as "excess" when they have exceeded seventy-five percent of their service life. Once designated, excess ships can be leased at no cost to the recipient. The costs involved in taking a decommissioned ship out of mothballs is high enough to preclude potential lessee affordability. For example, Argentina was offered the ex-U.S. oiler Ashtabula (AO-51), but the proposal was turned down because, among other things, the price of refurbishment was $51 million! From interviews conducted at OP-613 and OP-615 in September 1991.

training personnel require additional investments of human and material resources.[235] Furthermore, the cost to prepare a mothballed ship for foreign transfer, as calculated by NAVSEA, considers only the cost of making the ship safe to sail, not necessarily mission-capable.[236] In other words, the ship will be able to steam, but may not be able to place ordnance on target. This means the recipient has to absorb the further costs of overhauling weapon systems.

Public awareness of ship transfers to the Southern Cone is probably low. However, the general public may not support the expenditure of FMS credits to provide warships to these countries when they realize the recipient costs involved, and the fact that the region has pressing social needs and budgetary quandaries. Even if an ABC country expresses a desire for one of these ships and acknowledges the hidden costs involved, U.S. policy-makers should consider that the recipient's scarce monetary resources may be better employed to solve problems such as poverty, hunger, disease, and overpopulation. The danger in relating these types of concerns to the potential recipient is the possibility of evoking sovereignty concerns.

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[235]Ian Anthony, The Naval Arms Trade (Oxford: Oxford University, 1990), 165.

[236]Interview with Mr. W.A. Wither, Head, International Programs Branch, OP-615, 28 September 1991.

E. TECHNOLOGY TRANSFER

The issue of technology transfer is a sensitive one for the United States government. President Bush has used this concern to preclude the delivery of items that could be used to further the proliferation of nuclear weapons.[237] Under the Missile Technology Control Regime (MTCR), the United States and other signatories have agreed to restrict the trafficking of technologies to the Third World that could be applied to the development of ballistic missiles capable of delivering nuclear weapons.

The MTCR does not currently specifically address any of the technologies found aboard the Adams- and Coontz- or Knox-class warships. The most sensitive technology associated with any of these platforms vis-à-vis ballistic missile technology is the Standard-series surface-to-air (SAM) missile systems aboard the Adams- and Coontz-class. One strategy used by Third World countries seeking to acquire ballistic missile technology is to convert foreign-supplied SAM missiles to surface-to-surface (SSM) ballistic missiles.[238] Under a more restrictive MTCR, proposed by the Soviet Union in 1989 and analyzed by various U.S. agencies, the Standard-series SAM systems may be included in the

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[237]See, for example, "Bush Prohibits Sale of Parts For a Satellite to the Chinese," The New York Times, 01 May 1991, A6.

[238]See Missile Non-Proliferation: Implications for the United States Navy, Draft Final Report, Defense Nuclear Agency, 22 January 1990, 11.

future.[239] By late 1991, however, this proposal had not received serious U.S. consideration.

Technology transfer has not been a consideration with regards to the Adams-class ships that have been considered for foreign transfer to date. The relatively advanced passive sonar capability in these ships, including the SQR-15 towed array carried by the Knox-class, is not a technology-transfer problem either. The main consideration here is the passive ASW training that would be required by ABC navy operators in order to effectively use the equipment.[240] None of the Pentagon nor State Department officials interviewed felt the technology of these ships would factor into the transfer decision-making process.[241] In sum, technology transfer is not an important consideration vis-à-vis the transfer of standard missile and older generation towed array ships to the Southern Cone.

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[239]Ibid., B-6.

[240]Interview with Captain Patrick Roth, OP-613, 10 September 1991, Monterey, California.

[241]Interviews with John P. Caulfield, Deputy Director Office of Brazilian Affairs, State Department; Captain Roth, Head OP-613; Mr. W.A. Wither, Head OP-615; Commander Thomas W. Wilkins, NIPO ship transfer officer, in Washington, D.C., 26-27 September 1991. Also, Mr. Mike Cotter, Director, Office of Defense Relations and Security Assistance, State Department, in Monterey, California, 09 August 1991.

F. SUMMARY AND CONCLUSION TO CHAPTER VIII

This chapter has reviewed the most important potential disadvantages regarding the transfer of U.S. warships to the Southern Cone. The possibility of delivered ships being used against U.S. interests is slim, although the civil-military relations of each country currently make the possibility of a future military coup a potentiality. Should the military assume power, there are elements within the armed forces of Argentina and Brazil that have expressed anti-U.S. sentiments. The chance of precipitating an arms race among the ABC countries, should U.S. ships be transferred, is slight due to the relatively good relations the three are currently enjoying. Even though Chile continues to suspect Argentine intentions, neither of these two countries, nor Brazil, have economies that can support an arms race involving warships.

One major problem of transferring ships at the end of their service life is the significant hidden costs of operating and maintaining these platforms that will be absorbed by the recipient. The difficulties associated with the high pressure steam propulsion plants of these platforms were a major factor in their decommissioning or transfer to the fleet reserve. It is logical to expect a Southern Cone recipient to experience the same or greater degree of difficulty in keeping them operational. If transferred ships end up berthed at repair facilities for significant

stretches of time, it may cause resentment on the part of the recipient toward the United States. It would also degrade the potential capability of these navies to serve U.S. interests.

The economies of the Southern Cone cannot support the purchase of new warships. This is why these countries shop the world's used-ship market. It may be that the two- and three-decade-old U.S. ships are all that they can afford. Even if leased at no cost, the long-term expense of operating and maintaining these ships is considerable. Unfortunately, the social welfare of their populations may suffer as a result of supporting a navy they cannot afford. However, U.S. policy-makers would risk insulting a potential recipient if this concern was used to reject a transfer.

Finally, the issue of technology transfer as it is contained in the MTCR, does not appear to be a U.S. concern regarding the delivery of Standard missile ships to the Southern Cone.

IX. FUTURE U.S. WARSHIP TRANSFERS TO THE SOUTHERN CONE: OPTIONS FOR U.S. POLICY

This chapter will outline three policy options available to the United States vis-à-vis ship transfers to the Southern Cone. The ships of concern are the Adams-, Coontz- and Knox-class. The transfer method of choice is the lease (Chapter Six). This chapter examines the following policy options: (a) no future transfers, (b) maximize the number of ship transfers to the Southern Cone, and (c) emphasize a steady but low quantity transfer of these ships.

A. POLICY OPTIONS

1. No Future Transfers

U.S. policy-makers who conclude that the disadvantages of ship transfers to the Southern Cone outweigh the advantages may decide to not support any future such transfers. Backers of this option would probably justify their decision by explaining that first, in light of the current arms control climate, the U.S. should curtail its arms transfer programs, especially now that the Soviet threat has subsided. Second, because the ABC countries face pressing social and economic dilemmas, scarce budgetary funds should not be spent on large weapon acquisitions designed to be employed against a non-existent external threat. Third, the age of the U.S. ships considered for

transfer would only result in large, long-term upkeep and maintenance costs.

2. Maximize Number of Future Transfers

Those that strongly believe the advantages of U.S. ship transfers to the Southern Cone far outweigh the disadvantages may support a future policy in which the United States attempts to maximize the number of such transfers. Backers of this option would propose that the U.S. subsidize the reactivation and transfer costs to make lease of these ships as economically-attractive to the Southern Cone as possible. They would probably point out that first, as the U.S. Navy draws down to as few as 325 active ships as early as the year 2000, it is imperative that other navies, located in regions of interest to the United States, should be able to employ relatively capable ships in support of mutual security concerns. Second, although there is currently minimal conventional extra-hemispheric security threat to these countries, regional security threats exist for which naval maritime power could be employed. Specifically, it is likely that the ABC militaries will adopt some degree of support for a drug interdiction mission, especially since their traditional missions are not garnering civilian support for naval budgets. Third, should another Soviet-style global maritime threat develop in the future, the United States would face a

reconstitution scenario. Ships operated under lease by friendly ABC navies could be rapidly reassimilated into the U.S. fleet for employment in distant operational theaters. Alternatively, the ABC navies could be relied upon to secure their regional waters, confident that the technology of these ships would serve them adequately. Last, the transfer of ships serves to continue to improve naval ties between supplier and recipient and may even contribute positively to the consolidation of democracy.

3. Recommended Policy Option: Periodic Transfer of a Few Vessels

The best option for the United States is to make available a small number of destroyers and frigates for lease to the Southern Cone. The United States should attempt to convince the ABC countries that, despite their current economic shortfalls, it would be in their best interest to maintain some blue-water capability. The U.S. Navy must attempt to counter its own force drawdown by convincing Congress that ship leases are a long-term political, military, and security investment that should be made as economically appealing to the recipient as possible. Subsidies for reactivation and transfers costs, which are often prohibitive to potential ABC recipients, would constitute only a small fraction of the United States' military and security budgets. The lease of one or two

ships a year would allow U.S. security interests to be served while minimizing the economic disadvantages of ship transfers.

This policy would reinforce the concept of a united Western Hemisphere in which a predominant United States coordinates and encourages military and economic interrelationships. The breakup of the world into regional trading blocs may require the U.S. to protect its dominant Western Hemisphere role against external threats. Only with close military, political, and economic ties within the hemisphere, especially between the United States and the large ABC powers, can the hemisphere's cohesiveness be maintained. Along with economic programs such as the Enterprise for the Americas Initiative (EAI), the transfer of warships to the Southern Cone would be a positive step toward enhancing hemispheric maritime security and naval relationships.

In sum, the advantages outweigh the disadvantages of ship transfers to the Southern Cone. Economic troubles and military cutbacks in the Southern Cone make ship leases the most viable method of sustaining long-term ABC naval capabilities. Although these ships are old, they are still capable of serving both U.S. and Southern Cone security interests. Reactivation and transfer costs, however, precludes the transfer of a large number of these ships.

X. CONCLUSION

The introduction addressed a number of matters related to the transfer to the Argentina, Brazil, and Chile of Adams-, Coontz-, and Knox-class warships. Those matters include (1) whether these ships are actually needed by the ABC navies; (2) what ship transfer method should be employed; (3) analyzing the pros and cons of transferring these ships to the Southern Cone; and (4) options for future U.S. ship transfer policy. This chapter will capsulize the findings for each issue and address areas for further research.

A. SUMMARY OF FINDINGS

1. Needs of the ABC Navies

The geopolitical security interests of each of the ABC countries mandates a viable blue-water capability. Due to economic difficulties, naval budgets have been reduced over the past decade. As a result, warship acquisitions have been minimal. Also, the Soviet Union has subsided as the region's main external security threat, making it more difficult for these navies to justify ship procurements. Nevertheless, each of these countries has other security interests that require viable blue-water navies. A weighted factor-analysis method was use to determine ship types desired by Southern Cone navies. Each ABC navy has a significant need for guided-missile destroyers and frigates.

2. Ship Transfer Methods

The costs to the ABC countries of FMS sales and coproduction are prohibitive; these are not viable future transfer methods. The lease of excess U.S. vessels, the only method studied in this thesis, is the most viable method for transferring ships to Argentina, Brazil, and Chile, and is the cheapest way for these countries to build their force structure with relatively sophisticated warships. Additionally, leased ships can be recalled into the U.S. fleet in a reconstitution scenario.

3. Advantages and Disadvantages of Ship Transfers To the Southern Cone

The advantages of transferring these ships to the Southern Cone include the fact that U.S. and Southern Cone security interests overlap. The United States and the ABC nations have security interests in Antarctica and the South Atlantic and South Pacific oceans. Drug interdiction, already a U.S. security interest and a mission of the U.S. Navy, is becoming a security issue for the ABC countries. Lacking a traditional external security mission to justify their budgets, these navies may soon adopt drug interdiction as a primary mission area. If so, they could be encouraged to supplement U.S. Navy operations. The Adams-, Coontz-, and Knox-class ships have the ability to perform sustained

drug interdiction operations and each has significant surface and air detection capability.

Other advantages of ship transfers are the positive influences they would have on U.S. industry and the consolidation of ABC democracy. Finally, transfers would enhance the military and political ties between the major powers of North and South America.

The greatest potential disadvantage of transfers is the current social and economic woes of these countries. Opponents may argue that scarce fiscal resources would be better spent on non-military programs.

4. Options for U.S. Ship Transfer Policy to the Southern Cone

There are basically three future transfer options: (1) no future transfers; (2) a maximum number of transfers, reminiscent of U.S. policy following World War Two; and (3) a limited number of future transfers. This thesis concludes that option three maximizes the advantages while minimizing the economic impact, on both the U.S. and the Southern Cone, of future ship transfers. It is recommended that the United States look into subsidizing the reactivation and transfer costs of these ships to make the transfers more economical for the ABC countries.

B. AREAS FOR FURTHER RESEARCH

This thesis raises several related issues pertaining to future ship transfers. First, should each ABC country be given equal opportunity to lease these ships? What criteria should be used to rank recipients? It is certainly possible to transfer ships to all three countries, but policy-makers may want to use the transfers as incentives and rewards for adopting pro-U.S. global political, environmental, and economic policies.

Second, with the almost certain degradation of U.S. ship-making capacity as domestic orders dwindle, what is the possibility of building ships and submarines for export? Although the ABC countries would probably not be potential customers, other countries have expressed interest in new, U.S.-made vessels. There is a need to discover if there is a viable way to produce sophisticated warships for export without transferring critical production technology.

Last, there is a need to study the feasibility for a hemispheric military organization. Historical attempts at Western Hemisphere military alliances have ultimately failed, but there seems to be a need for a military counterpart to the hemispheric free trade zone described in the EAI. With an uncertain economic future in light of the advancement of the European and Asiatic trade blocs, and with a drawback of U.S. forward-deployed forces in Western

Europe and the Far East, it may be time for the United States to refocus its attention towards Latin America.

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